HISTORIC LAND USE STUDY

OF

A PORTION OF THE BARATARIA UNIT

OF

THE JEAN LAFITTE NATIONAL HISTORICAL PARK

Prepared for the

Jefferson Historical Society

and the

Jean Lafitte National Historical Park

PART II

Betsy Swanson
January 15, 1988

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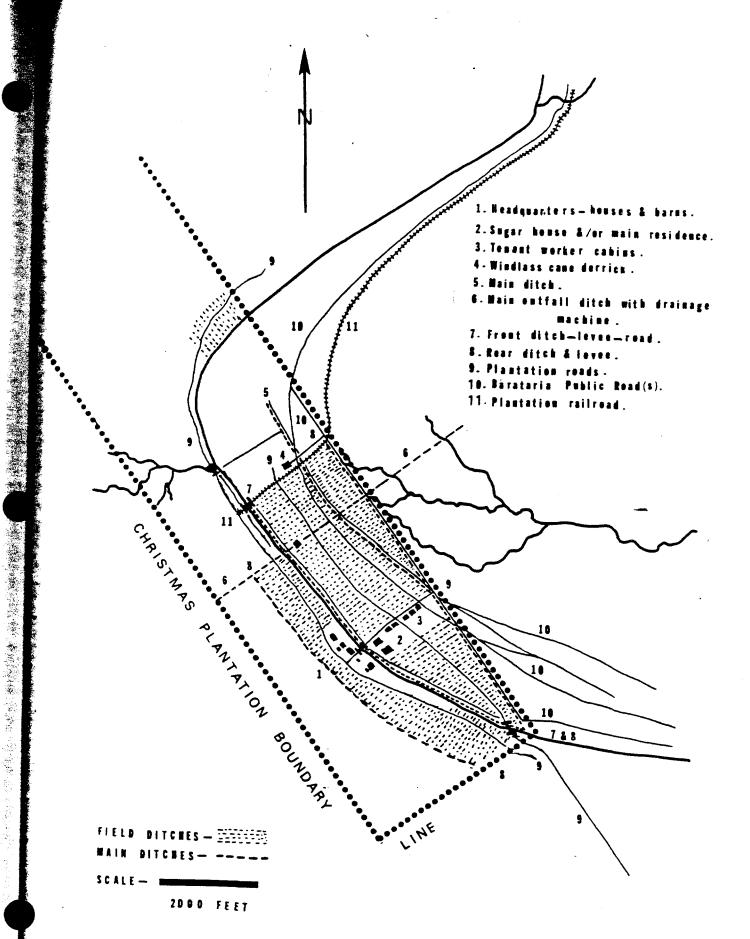
Jean Lafitte National Historical Park

PART II

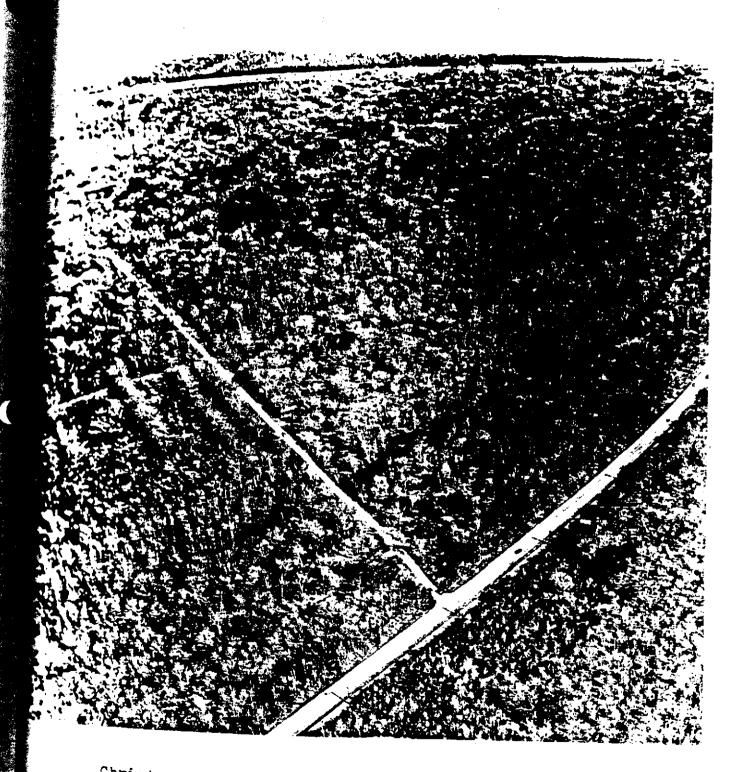
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January 15, 1988

# CHAPTER VI

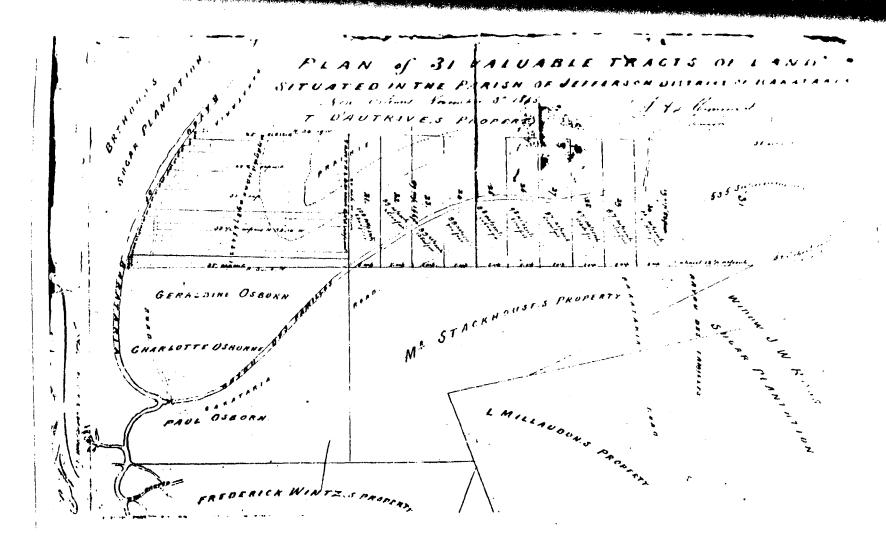
THE CHRISTMAS PLANTATION



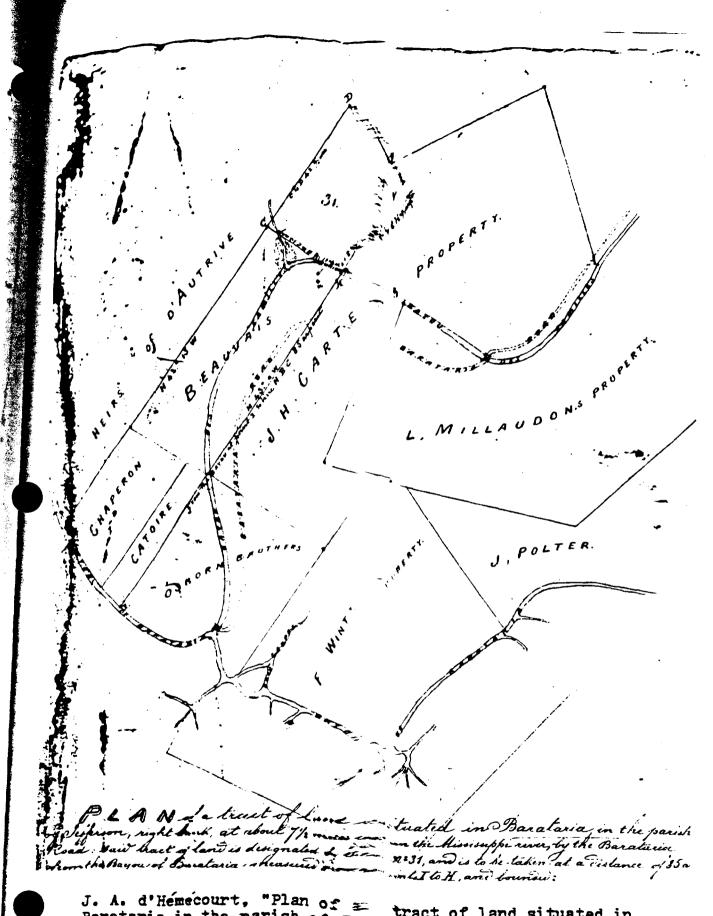
Cultural features of the Christmas Plantation, 1865-1910.



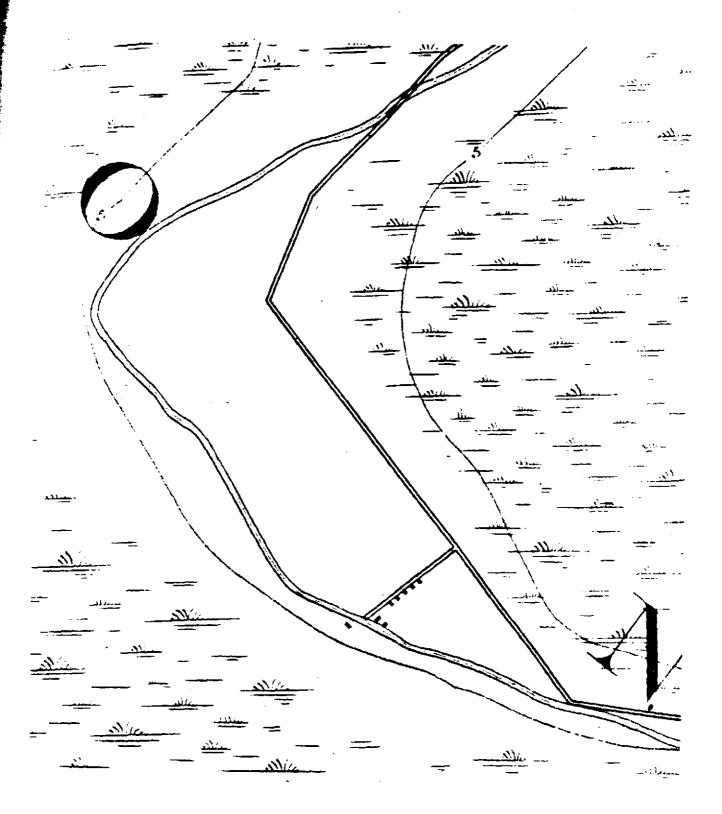
Christmas Plantation Headquarters area, looking SE. 2/23/86.



J. A. d'Hémécourt, "Plan of 31 Valuable Tracts of Land Situated in the Parish of Jefferson, District of Barataria," November 3, 1865. Annexed to act of sale of land from Marie Julie Gabrielle Lemoine, widow Pierre Rochefort, to Henry Chapron, November 11, 1865, E. J. Gottschalk, notary, NONA.



J. A. d'Hémecourt, "Plan of tract of land situated in annexed to act of sale of land ferson," February 11, 1867, Lemoine, widow Pierre Rocheste, from Marie Julie Gabrielle 1867, E. J. Jottschalk, notation. NONA.



United States Geological Survey. "New Orleans, La.," 15 Minute Topographic Quadrangle, Edition of Nov. 1891, reprinted 1931, surveyed in 1890. Detail of study area.

In 1865-66, when Rufus King Cutler and Pierre Ernest Beauvais purchased the original tracts of lands for the Christmas Plantation from Marie Julie Gabrielle Lemoine, widow of Pierre Rochefort, the land was probably entirely forested. It had not been cultivated for half a century, and the first task of the new owners was to clear the land. 1

Cutler and Beauvais gave the plantation the name of "Christmas" because the act of sale by which they purchased the first tract was made on December 23, 1865. This sale was for a 20-by-40-arpent tract bordering both sides of Bayou des Familles, stretching southward from the bend of the bayou above its confluence with Bayou Coquilles. On July 27, 1866, they purchased another tract measuring 20 by 10 arpents adjoining the south end of the first tract. The plantation thus stretched for 50 arpents along the bayou. It occupied the center portions of the 10-arpent tracts originally belonging to Alexandre Guerbois and Antoine Marigny Dauterive. The southern limit lay upon the 1794 property line between the Spanish land grants of Louis Pelteau and John Normand. This property line is today marked by an electric powerline right-of-way which forms the boundary of the park and the study area. 2

On November 3, 1865, this 50-arpent strip had been subdivided into 10 5-by-20-arpent tracts crossing Bayou des Familles by surveyor J. A. d'Hémécourt in order that the Widow Rochefort might offer the land for sale as small farm

plots. The Civil War and slavery had both come to an end, and the sugar industry was almost non-existent in Louisiana. Many former plantations were being subdivided and sold to small farmers. D'Hémécourt's five-arpent tracts were reminiscent of the five-arpent tracts granted to the Canary Islanders on Bayou des Familles by Spanish Governor Gálvez in 1778. However, the 10 five-arpent tracts purchased by Cutler and Beauvais were for the establishment of a sugar plantation.

Rufus King Cutler was born in Virginia and had lived in Louisiana for 20 years. A New Orleanian, he played a prominent role in Reconstruction politics. He was a delegate to the Convention for the Revision and Amendment of the Constitution of Louisiana in 1864. On the same year, he was elected by the new State legislature to replace John Slidell in the United States Senate. However, Congress did not allow Cutler and other Louisiana senators to take their seats. 4

Pierre Ernest Beauvais was born in 1829 on Bayou
Lafourche and moved to New Orleans as a child. Rufus King
Cutler's wife, Marie Palmyre Beauvais, was probably Pierre
Ernest's sister. Cutler sold his undivided half of the
plantation to Beauvais on November 5, 1866. Through
bankruptcy and mortgages, Beauvais operated the plantation
for 27 years.<sup>5</sup>

Between 1869 and 1884, Beauvais' yearly sugar production on the Christmas Plantation ranged between 21 hogsheads

and 350 hogsheads. However, he was never free of debt. He owed mortgages on the property, payments on loans for supplies and sugar-making equipment, and taxes. By 1876, Pierre Beauvais was bankrupt. The plantation was sold at public auction to the New Orleans National Banking Association for \$6700.00. The bank then leased the plantation to Pierre's son, William Coiler Beauvais, who was "a minor in the twenty first year of his age, but duly emancipated under a judgement of the Honorable Parish Court of and for the Parish of Jefferson" to engage the lease. In 1879, the bank sold the plantation to the elder Beauvais for \$15,000, with payments to be made by promissory notes.

After the abolition of slavery, planters were forced to experiment with new ways to profitably cultivate sugarcane and manufacture sugar. Advances in technology reduced the need for hand labor, but sugar-making machinery was expensive and the costs indebted many planters. New systems of labor were tried, including profit-sharing agreements or share cropping, leasing of the land, and tenant systems. White laborers were hired, and efforts were made to import Chinese and German laborers. However, most of the hired hands were freed Negro slaves.

Most of the field hands on the Christmas Plantation were probably Negroes, but Pierre Beauvais sometimes leased portions of the cane fields to other planters to cultivate the cane. Beauvais divided the fields into one-arpent lots and, in 1874, leased four lots to Julius Madison Johnson and

three lots to Augustin Daspit. The contracts are interesting examples of post-Civil War efforts to reorganize the plantation labor system. Beauvais' contract with Johnson is quoted below.

8th March 1874 Contract State of Louisiana City of New Orleans

P. E. Beauvais . with

J. M. Johnson

Be it known that this day before me Charles Stringer, a Notary Public in and for the City of New Orleans Parish of Orleans and State of Louisiana aforesaid duly commissioned and qualified

Personally appeared Peter E. Beauvais, and with him also appeared Julius Madison Johnson both of of the Parish of Jefferson in this State.

Who declared that they have contracted and

agreed mutually as follows to wit:

The said Beauvais has agreed to let unto said Johnson for one year commencing from the First of January A.D. 1874. A certain tract of land first of said Beauvais Sugar Plantation situated in the district of Barataria, Parish of Jefferson, and known as Lots one, two, three and four, above the Sugar house on said plantation, said lots fronting on the Bayou des Familles and running to the Public road except Lot No. one, which runs as far as now planted with cane, and containing in all, about thirty-three arpents of land in superficial areas. Twenty-two and a half of which is now in 1st year stubble and four and a half in 2nd year stubble and the balance unplanted.

Said Beauvais in addition binds himself to furnish the necessary team and implements to cultivate said land, and advancing all seed cane necessary to plant and tract free of charges to said Johnson; also furnishing all necessary timber for fuel in the manufacture of sugar and molasses from said crop, without extra charges; also agreeing to furnish the sugar house in good repair at the proper time to be used in grinding and making said crop; also furnishing the necessary cabin or plantation house for the residence of

said Johnson.

And the said Johnson on his part binds and obligates himself to truly and thoroughly ditch the above described land, line the 2nd years stubble with a good stand of sugar cane, plant the unplanted lands in a good stand of cane, with rows seven feet, two canes and lap, throughout each row: the whole of the ditching and planting to be completely finished by the 1st day of April 1874. Also binding himself to cultivate and drain during the growing season the whole of said tract of land to the satisfaction of said Beauvais: also to chop and haul to the Sugar House in time to be fit for use, at least five cords for each arpent of cane cultivated; Also to pay all expenses that may accrue in the raising and manipulating said crop and putting it in a marketable shape of sugar and molasses in the sugar house, and then to deliver to said Beauvais one full third 1/3 as his share of the crop for which a lien and privilege is hereby granted to said Beauvais for said share as well as for all advances he said Beauvais may make to said Johnson, in the raising of said crop. is also understood that sufficient seed cane shall be retained out of the crop, free of charge to said Beauvais, to replace that furnished by him, for planting purposes as herein before mentioned. Any other crops raised on said land are to be governed by the same provisions as above.

The said Johnson also agreeing to keep in good repair and free from obstruction the main roads and bridges across said land for the use of the

plantation.

The said Beauvais only furnishing team for crop purposes, and charging feed of team while so used.

The said Beauvais to have the management of the sugar house, hiring of extra hands, while rolling or grinding, and all hands working during grinding season, whether croppers or not, shall be paid alike, according to quality of hands and when grinding is over, the expenses of grinding so shall be paid by the croppers, in proportion to the amount of sugar they may have respectively made.

Unlike most pre-Civil War planters, Beauvais probably did manual labor on the plantation, and his family probably helped work in the fields, barnyard, and vegetable garden. Pierre Beauvais was married to Philomena Octavia Walker. In 1883, his brother, William St. James Beauvais, a widower, died "in destitute circumstances" and left four children, Francis W., aged 18; Joseph Rafael, aged 16; Rufus, aged 14; and Cecile, aged 7. Pierre Beauvais was named their tutor. He also had at least one son and one daughter. 9

In 1880, Pierre Beauvais purchased more land adjoining the north end of the plantation tract from Joseph H. Oglesby for \$1500, to be paid in promissory notes. The additional tract contained about 530 superficial arpents. The property had been part of the adjoining Carter Plantation. Upon Carter's bankruptcy, it had been sold at public auction in 1875 to John A. Peel and Byron M. Pond. Oglesby acquired the property from Peel and Pond in 1877.

The total measurements of the Christmas Plantation were about three quarters of a mile wide and two and a half miles long. The whole property was not put in cultivation. Some areas were reserved for cutting timber and grazing cattle. By 1891, there were 150 head of cattle and 18 head of mules on the plantation. 11

In 1885, the Christmas Plantation sugar house burned. Beauvais began cultivating rice, a crop that many neighboring Barataria planters were now growing. He mortgaged the plantation to Charles Joseph Brown in 1890 and, again, in 1891. 12

Charles Joseph Brown was born in New Orleans in 1850. His widowed mother opened a grocery in the town of Harvey in 1867. C. J., as he was called, worked on the tow-path of the Harvey Canal pulling barges, luggers, and skiffs, He became manager and later, owner, of the grocery store which was named Half Way House. 13

Beauvais became deeply indebted to Brown through mortgages, loans, and credit purchases at Brown's store. Beauvais sent messages to Brown by boats passing up the Harvey Canal, and Brown sent provisions by packet steamers going down the canal. Among the items Beauvais ordered from Brown in the early 1890s were 14

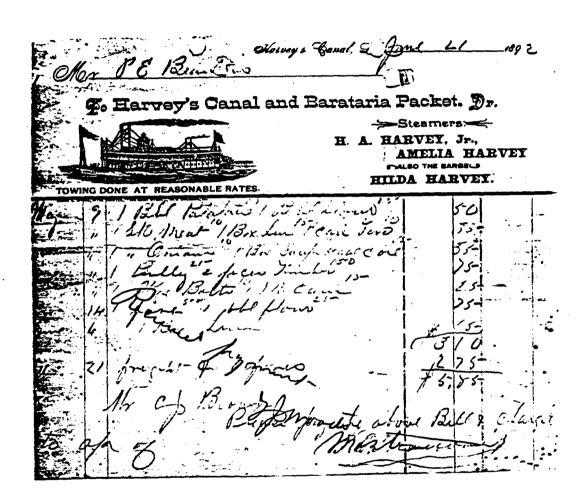
tobacco crackers macaroni flour coal lime lard rice corn oats potatoes meat by the shoulder onions red beans candles lamp wicks salt coffee starch an umbrella socks black eye peas lady peas cow peas matches baking powder white beans

whiskey mosquito bars butter buckets grits lamp chimneys blue jeans cottonade shirts garlic turnip seed lettuce seed radish seed cabbage seed ladies shoes bolt cotton stockings calico sauce pans bowls rope a broom soap thread blueing oil washing soda cod fish

Beauvais would jot notes on his supply orders to Brown, such as "Mrs. Beauvais wishes 4 sacks of good corn for her chickens for Monday's trip of boat." Brown also paid the

larvey's Canal and Barataria Packet To Stermer AMELIA Choal

Bill of lading on the Harvey Canal to P. E. Beauvais, May 8, 1892. Charles J. Brown vs. Pierre E. Beauvais, 21st Judicial District Court, Docket No. 251, January 14, 1895. Jefferson Parish Old Judicial Records, Gretna.



Bill of lading on the Harvey Canal to P. E. Beauvais, June 21, 1892. Charles J. Brown vs. Pierre E. Beauvais, 21st Judicial District Court, Docket No. 251, January 14, 1895. Jefferson Parish Old Judicial Records, Gretna.

wages of some of Beauvais' hired hands, Billy Saddlemeyer, John Donaldson, Mack Connelly, and Leon Robichaux who labored on the rice crop and chopped wood. 15

In 1891, Beauvais leased 230 arpents of the Christmas Plantation, "together with the use of certain buildings thereon, also the use of one boiler and engine" to Melancie Robicheaux and Gracien Rome to plant and cultivate rice. The lease was made "in consideration of one fifth of all the rice raised on the said tract of land and delivered in packs at the thresher." 16

In 1892, Beauvais again planted the 230 arpents, which were leveed and dammed, in rice. He wrote to Brown "I have been pumping night and day for two weeks and elevating twice as much water as ever before and have not yet been able to saturate the whole field the drought is so severe." 17

Beauvais sold the plantation to Brown in 1893 for \$11,346.40 which was the sum of Beauvais' mortgages plus interest. Brown returned the Christmas Plantation to the cultivation of sugarcane. He and his wife, Louisa Meyers, apparently did not live on the plantation but rather remained in Harvey. 18

C. J. Brown encountered financial problems similar to those experienced by Beauvais. He mortgaged the plantation several times. In 1899, he contracted with neighboring Southside Plantation to sell cane and to build a railroad to his cane field. Southside Plantation Company advanced Brown

the money to build the railroad, and Brown mortgaged the railroad to Southside. 19

According to C. J. Brown's grandson, Dr. Charles Odom, a river crevasse flood ruined Brown's sugarcane crop. He sold the plantation in 1903 to George H. T. Shaw. On the same day that the act of sale was passed, Shaw leased the plantation to Southside Plantation Company for the cultivation of sugarcane, together with mules, equipment, and buildings. The lease was to expire on January 1, 1904, and this date may have marked the end of the active years of the Christmas Plantation. 20

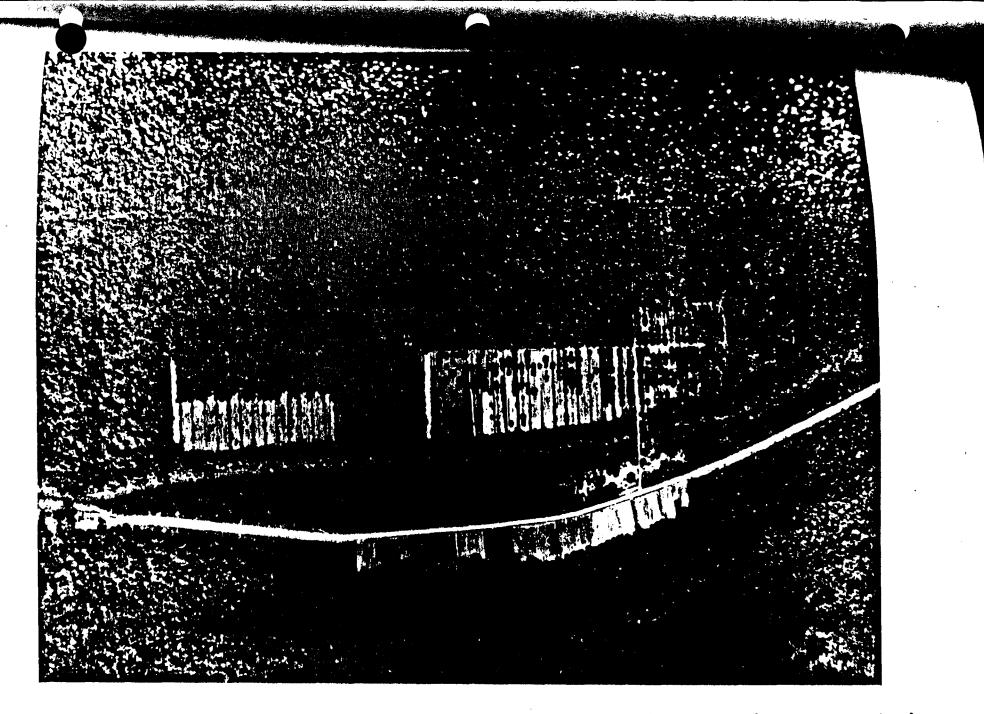
# CULTURAL FEATURES OF THE CHRISTMAS PLANTATION

Numerous cultural features dating from the period of the Christmas Plantation remain on the land in the study area, as shown on the maps in this report. The field patterns are the most noticeable and widespread feature. Their reforested appearance today is described earlier in the chapter "The Patchwork of Hardwood Succession in the Study Area."

The field ditches are about six feet wide and are spaced about 100 feet apart. The beds and furrows of the old cane fields are about five feet apart. In the pecan orchard, the beds and furrows are much larger, but the field ditches from the cane fields remain. The fields are fronted at the bayou by levees and a large ditch. The main ditch

of the old east bank natural levee. The perpendicular main outfall ditch had a waterwheel or pump. These are the largest and deepest ditches on the plantation. They are as much as eight feet wide and four feet deep. Old field roads that are about 15 feet wide can still be seen in the woods, and their routes are shown on the maps in this report.

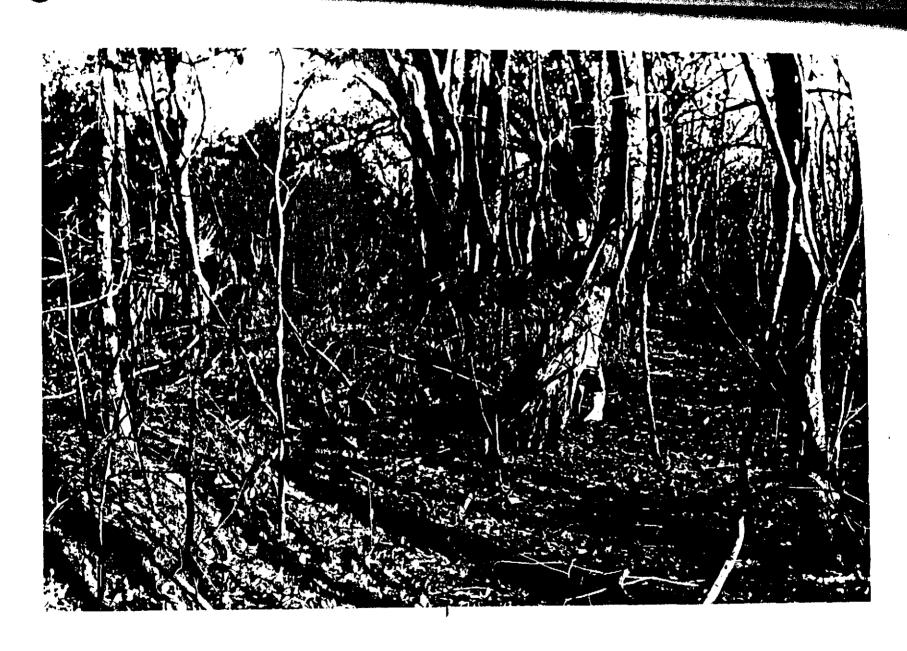
The following historic instructions for the cultivation of sugarcane and rice in south Louisiana are probably close descriptions of the methods used on the Christmas Plantation.



Pecan orchard area, May 17, 1945. National Ocean Survey for the National Oceanic and Atmospheric Administration, C&GS 20 LA.1250 29 90 C 2790, National Archives, Washington D. C.



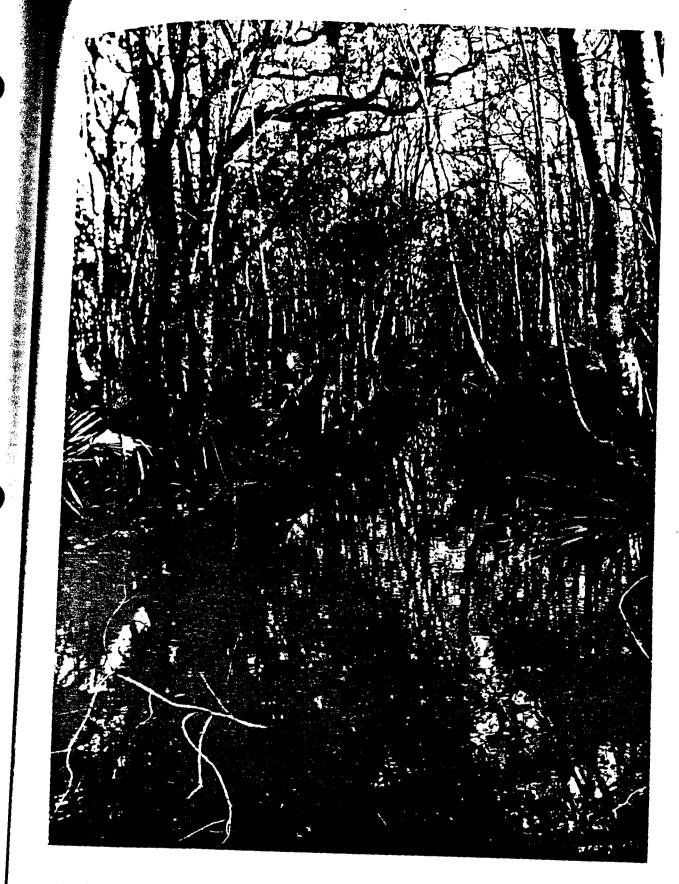
Rangia shell of pre-historic midden in plantation levee fronting Bayou des Familles. 3/10/86.



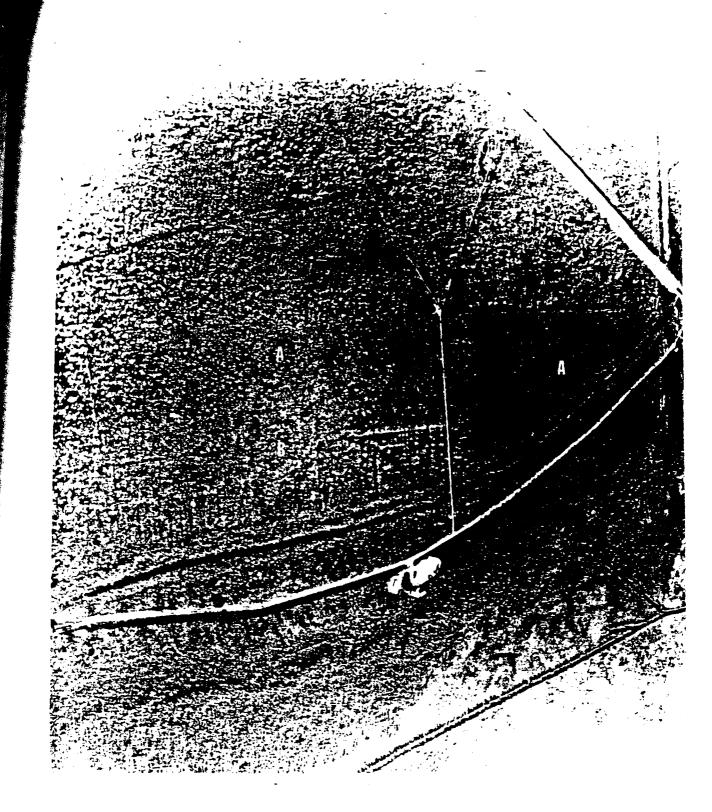
Christmas Plantation front ditch and levee bordering Bayou des Familles, looking SE. 3/86.



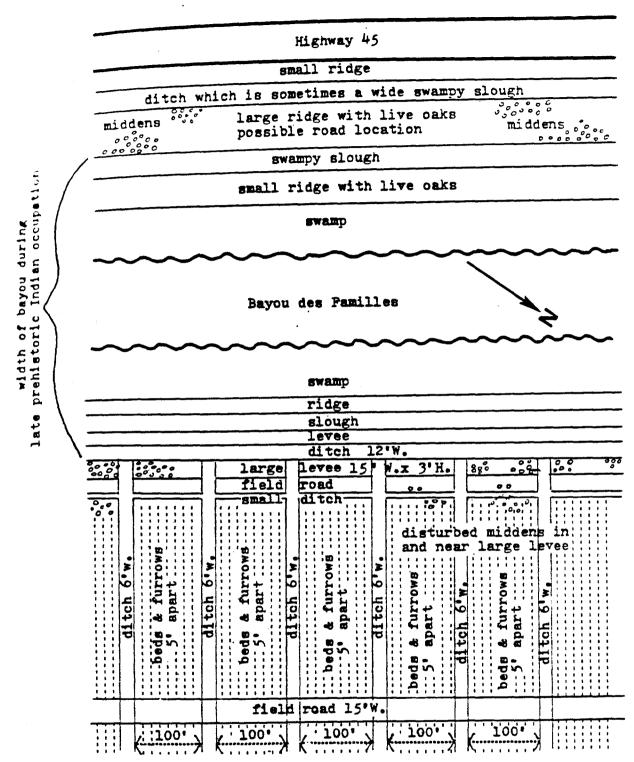
Main outfall ditch of the Christmas Plantation, at 2350 feet NW of the Shell Road, looking NE from Third Road. 2/86.



Drainage ditch between Highway 45 and Bayou des Familles, south of the Shell Road, probably dating back to the plantation period, looking SE. 3/86.



Principal area of the Christmas Plantation sugarcane fields. A: Sugarcane fields. B: Sugarcane fields reused as pecan orchard. Air photo, 2/23/86.



Christmas Plantation sugar cane fields

Schematic of the Christmas Plantation sugar cane field system and the ridge and slough bank topography of Bayou des Familles in the southern portion of the study area. Not to scale.

INSTRUCTIONS FOR CULTIVATING A FALLOW LOUISIANA SUGARCANE PLANTATION OF THE POST-CIVIL WAR PERIOD

from L. Bouchereau, <u>Statement of the Sugar and Rice Crops</u>, <u>Made in Louisiana in 1870-71</u> (New Orleans: Young, Bright & Co., 1871), pp. x-xii.

To begin as it were from nothing, we suppose you buy a plantation that has been abandoned for a long time and is a mere "wild waste."

The first thing to be done, after clearing off weeds, briers and small timber, and burning them up, is to clean out all ditches and canals and to dig new ones. Remember that water is the greatest enemy of the cane, and that to insure a crop you must have a sufficiency of ditches to carry off rain water at once. No money spent in ditching is thrown away, the more ditches you have the better.

In breaking up the land, use four-horse plows and run them as deep as you can; in clay soils it is not unusual to see a plow drawn by three pairs of horses or three yoke of oxen. When all turned over, go over again with lighter plows and harrows and rest not satisfied till your land is mellow. If your land has thus been prepared in the fall of the year, you can plant cane on it in February, but if this first breaking up is done in January or February, it would be unprofitable to plant more cane than will suffice for seed the coming year. You should in this case plant corn, and when the corn is laid by plant peas through it, and in September when the corn has been housed, go over your field with a heavy four or six horse plow and plow in all the corn stalks and pea vines, thus securing the very best bed for planting cane.

As stated above, we presume that your land has been thoroughly broken up and pulverized in the fall-we will now prepare to plant the cane.

Lay off your rows six and a half feet apart, and open down deep with a subsoil plow to let the rain water filter through. (Take good care to have cross drains at least at every forty yards where your leading ditches are two acres from each other; and when these are but one acre apart let your cross drains be not more than seventy yards apart.) After this bed up, or as we call it flush up, and open

again twice, back and forth; then run a fluke plow just deep enough to allow your canes (when laid down in their place) to be on a level with the water furrow between the rows. In no case must the canes be more than two inches below the furrow, because "water is the greatest enemy of the cane."

February is the best month in which to plant cane, for then you need not cover the seed with more than two or three inches of earth, thereby saving one scraping, (which canes planted in the fall have now to undergo) and as the soil is now loose the spring heat easily penetrates to the cane and causes it to germinate at once.

Your furrows being all ready lay down your canes side by side, four inches apart, lapping them over about eight inches and laying the tops all down in the same direction, so that the lap will always show two tops and two butts, thus equalizing the number of sound "eyes" which are generally greater in the butts than the tops.

Having arrived at the first cross drain, leave the space necessary and begin again beyond it, and so on to the end of the row. A one horse plow, or a light two horse plow, comes behind and throws dirt over the cane, leaving a clean water furrow on each side of the row. The plow is followed by a hoe to break up small lumps and cover up what the plow may have left uncovered, and particularly to keep clear all the cross drains. This covering of the seed with earth is best done by the use of the hoe alone, without using the plow, but at the present price of labor this would be too expensive. The plow causes the canes to crowd together sometimes, which would be avoided by the use of the hoe alone.

In dropping or dumping the cart loads of seed cane, the driver should commence at a distance from the leading ditch, say six rows, and continue on the seventh parallel row, and at short intervals, so that the planters can plant on each side of the load, saving thereby some distance in carrying the seed. In the evening before retiring from the field, see that every drain is clear, so as to be always prepared for a rain.

Your cane being all planted, direct your attention to

your other crops.

Towards the end of March you may scrape a little, that is remove some of the soil from on top the seed, taking care not to uncover too much before the 10th of April, for we sometimes have ice in the month of April, and if your cane is too much uncovered and the bud gets frozen below ground, your crop is irretrievably lost!

After the 10th of April you can repeat the operation of scraping, leaving only some two inches of earth. Stir up the ground between the rows with a light plow.

By the 20th of April every sprout should be out of the ground, and you are now to cultivate so as to make each sprout bring forth tenfold if possible. Remember that the closer the sprouts are to the surface, the sooner will they sucker, i.e. produce new sprouts. In new lands canes will sucker very fast, but in old lands they require a great deal of care and labor. If you find the young plants losing their color, a little more earth must be added; if growing too vigorously, bar off and draw away; if too dry, plow up and draw in; if too wet, do your best to keep clear of the grass.

Towards the end of April you will perceive little shoots coming up from each sprout; stir the earth back and forth around these, taking care to add but little earth to the sprouts until they have attained sufficient size to bear plowing to. If some are more forward in suckering than others, add a little earth to these.

When you think you have enough suckers, commence to add soil in earnest. Run a deep furrow off, next to your cane, then break up to your canes and finally, from the 15th of June to the middle of August (when the crop is laid by) keep busy with the hoe, filling in dirt well around the plants to protect the stubble against the coming winter's ices. And, in finally laying by your crop, be careful to open well all your furrows and cross drains and leaving them perfectly free to carry off water.

The cane crop being laid by, your next care is to prepare first for the coming grinding, and to house your

hay and corn. This being done, plow in all corn stalks and pea vines, and after allowing them a few days, prepare your ground for planting, and commence planting, and keep at it till Oct. 5th, when you should begin to save your seed cane.

In fall planting follow the directions given for February planting, except that you must cover the cane deep to protect the sprouts from the colds of winter.

INSTRUCTIONS FOR DRAINAGE AND IRRIGATION OF LOUISIANA SUGARCANE PLANTATIONS IN THE LATE NINETEENTH CENTURY

from William C. Stubbs, <u>Sugar Cane</u>, <u>A Treatise on the History</u>, Botany and Agriculture of Sugar Cane, and the <u>Chemistry and Manufacture of its Juices into Sugar, and <u>Other Products</u>, vol. 1 (Baton Rouge: Bureau of Agriculture and Immigration, 1897), pp. 42-47.</u>

#### DRAINAGE.

Nowhere on earth is drainage more essential than in the alluvial districts of Louisiana, and while many plantations may be considered well drained, the average planter has not yet fully appreciated the necessity for multiplying open ditches to the extent of forcing his soils to their fullest capacity. This is evidenced by a trip over the State and observing the varying distances between ditches which obtain in different plantations.

Only in very dry seasons can badly drained lands be made to yield large crops. Since these unfortunately occur only at long intervals, the average yields on such lands are far below their natural capacity. On badly drained lands neither fertilizer nor cultivation have their full effects, hence the discordant opinions which frequently prevail among our planters, from the use of the same fertilizer or the same method of cultivation. From the experience of this Station it is almost impossible to be "overdrained," provided the work of draining be intelligently performed. It is well for every planter to study his system of drainage, examine his ditches, see if they be deep enough, wide enough and sufficiently abundant to carry off our heaviest rainfalls and retain the "bottom or ground water" at a constant depth below the surface. Excellent results can be

obtained with open ditches, provided they are numerous, deep and wide.

In the lower sugar district these ditches should be at least as close as 100 to 125 feet, and deep enough to hold the bottom water at least three feet below the surface.

The expense and attention annually required for the preservation of open ditches and the loss of land incident to them, together with many other disadvantages would force all of our planters sooner or later to adopt

### Tile Drainage,

but for the great first cost, and to the absence of fall in the lands, by which the tiles can clean themselves. laid with great care on the Sugar Experiment Station, are gradually filling up with silt, and apprehension is felt that at an early day they will have to be abandoned and a return made to open ditches. There is not a great fall in the canal beyond the station into which the tiles empty, and every heavy rainfall backs the water over the mouths of the discharging tiles, checking the flow from the latter. This may account for the filling of our tiles with silt. This is greatly to be regretted, since the superiority of tiles over open ditches is apparent in every operation of the farm, from the flushing of the land to the harvesting of the crop, the great objection to the former being the\_ large outlay of money required in putting the tile down. It is confidently believed, however, that the decreased cost of subsequent cultivation, the increased area of land and the enchanced acre yields of products, to say nothing of the numerous and continuous little expenses and annoyances incident to open ditches will more than pay the interest on the investment and leave yearly a handsome balance for a sinking fund, which in a short time will liquidate the principal required for their construction.

The results have uniformly shown increased tonnage in all those plats where tiles have been used. This increased tonnage has, however, been attended with a decreased sugar content, a result which was to be expected from the known benefits of tiles. Upon tiled lands canes appear earlier in the spring and is the last to be killed in winter by the frost. This has several times been demonstrated on this station on plats with the same exposure and differing in conditions only in drainage.

Great care is needed in putting down tiles, and only experienced engineers should be entrusted with the work, since if proper grades be not given to the fall of the tile more harm than good may be accomplished. Again, the capacity of tiles of various sizes, as well as an acquaintance with our

heaviest rainfalls, must be known so that proper calculations may be made for the selection of tile sufficiently large to take off our heaviest rainfalls in a given time. It must be remembered that in this climate rainfalls of 5 to 7 inches sometimes occur. Owing to the humidity of our local climate a large part of these rainfalls must be drained off. The character of our soils also prevents rapid downward percolation. Tiles are too small when they will not drain off the rainfall in twenty-four hours after its cessation. Water closes the drain pores of the soils and temporarily obstructs the efficacy of the tiles.

Tables giving the capacity of different sized tiles are given in nearly all the works on drainage. The amount of water falling upon an acre may be easily calculated in gallons when the inches of rainfall are observed. It is therefore easy to avoid this error by simply learning the heaviest be drained and the amount of water to be carried off, and from the tables take the tiles capable of making this discharge in twenty-four hours.

It is even yet uncertain whether tiled drainage will permit of the entire closure of open ditches and quarter-drains on lands having a uniform fall from the banks of the liver back to the swamps. The rows are usually run with the lope of the land and in heavy rainfalls the water rapidly runs down the middle of each row and accumulates at the lower outlet through the tiles. Hence a quarter-drain is needed to let off this accumulated surface water.

Perhaps running the rows at right angles to the slope of the land and as near level as possible, may correct this ap-

Too much emphasis cannot be laid upon the importance of drainage to our sugar lands, and when a planter thinks he is well drained he will probably increase his yields and profits by doubling his ditches and quarter-drains.

# IRRIGATION.

The Louisiana sugar planter of to-day is confronted with low prices and unreliable labor, depleted soils and reduced yields, reciprocity treaties and increased imports, monopolistic trusts and monied combinations, prolonged drouths and injurious rainfalls. He must therefore call to his aid every means which will remove the obstacles to maximum crop production. Next to drainage, irrigation is perhaps the most

recorded factor in the problem of annual large crops. A full prop is rarely obtained oftener than once in five years, and eighty per cent. of the failures are assignable directly to drouths. Irrigation, therefore, eliminates the great element of chance from our planting operations, and together with good drainage make the planter nearly independent of the freaks and idiosyncrasies of the weather.

From accurately kept meteorological records it is learned that maximum crops of sugar are made in Louisiana after a mild, dry winter, succeeded by a spring with moderate rains, well distributed; in their turn supplanted by abundant showers at close intervals during June, July and August, winding up with decreased rainfall in September, with the remainder of the fall dry and clear. We cannot control the dry and warm winters, but we can mitigate the effects of a wet, cold one by proper drainage, and we can give our crops abundant water in the summer months by irrigation. Whenever we realize that water is the most essential chemical ingredient supplied to our plants and is needed for the transportation of all the other ingredients through the plant, then will provision be made to supply it in needful quantities, when rain is withheld. The amount of water needed by cane plants has already been dwelt upon. tents of the cells must be kept moist. The protoplasm of each active cell must retain its glutinous semi-liquid condition in order that its function may be properly performed. Decrease the moisture and you increase the consistency of the protoplasm and with it diminish the vital activity of the plant.

A plant must be properly charged with moisture in order to grow freely. Hence, in wet seasons, with an abundance of fertilizers, the sugar cane grows very rapidly, and if the moisture and other conditions favorable to growth be maintained till harvest, it comes to the sugar house low in sugar, since the sugar cells are gorged with a surplus of moisture. Interrupt the growth by dry weather and give the cane a period of respose, and its cells lose the excess of moisture, and the cane gives a juice high in sugar.

Irrigation is sometimes needed in Louisiana for other purposes than supplying the growing crop with water. Many a planter has lost his seed cane from dry rot when a slight irrigation of the soil in which it was windrowed would have saved it. Seed cane has frequently refused to germinate when planted in dry, cloddy soils, for its want of proper moisture, when irrigation would have furnished a superb seedbed. In many a field, in spring, may be seen the plow and cultivator rolling the obdurate clods to and from the young

plants in an honest but fruitless effort to pulverize them, when a mere saturation of them with irrigation water would have caused their disintegration.

There is scarcely a year that irrigation cannot be em-

ployed profitably on a plantation.

The Sugar Experiment Station established an irrigation plant in 1891, and since that time has used it successfully over twenty times. Crops in all stages of growth have been irrigated. Freshly fallowed lands have been flooded to bring them into a state of pulverization suitable for the planting of alfafa and clovers.

Cane rows have been opened and irrigation water run down them, to prepare the soil for the reception of cane.

Both surface and sub-irrigation have been tried; the former on our untiled lands, and the latter on tiled plats, using the tiles as pipes to carry the water, after closing with valves, the main connecting each plat. The tiles are four feet deep, and sub-irrigation through them is a great waste of water, and while large and growing plants with entensive root systems are completely watered, small plants in the elevated rows and clods on the surface are but little affected. Hence sub-irrigation is not always as effective as surface irrigation, nor as general in its application.

The results from irrigation of cane have been uniformly\_successful and satisfactory, sufficiently so to justify the assertion that the profits of irrigation were very large in tonnage and with no sacrifice of the sugar content of the cane.

In establishing irrigation ditches, the reverse of drainage ditches must be observed. In the latter, the line of lowest level from the levee to the swamp, is found and followed, while in establishing the main irrigation ditch the backbone, or line of highest elevation, is carefully determined and pursued. This ditch transports the water through the plantation. From this ditch on both sides water may be drawn into the lateral or quarter-drains, following still the lines of highest elevation.

From these laterals, water may be drawn into the lowest parts of the field. Our plan in irrigating was to fill the middles of the row nearly full, permitting the water to remain all night and drawing it off in early morning through the drainage ditches. By accident, however, it was found that cane would stand a complete inundation for forty-eight hours, with the water at a temperature of 72 degrees, whi the maximum temperature recorded in the station's weath bureau was 90 degrees F. No fears should be enterta: injuring the cane by too much water, for a reasonar say two days, in applying it, provided that when

drained off, it is well and quickly done; in other words, the land is well drained.

Water can easily be drawn from the adjacent river, or bayou, by nearly every sugar planter in the State. The erection of a boiler, pump and syphon will be needed to lift it over the levees. Nowhere, possibly, can a systematic irrigation plant be established and maintained at a less cost than in Louisiana, and our very variable seasons demand it as an adjunct to every plantation that aims to make maximum crops every year.

# A DESCRIPTION OF SUGARCANE CULTIVATION IN LOUISIANA IN THE EARLY TWENTIETH CENTURY

from F. S. Earle, Southern Agriculture (New York: The Mac-millan Company, 1908), pp. 122-26.

The methods of cultivation on the best Louisiana plantations may be briefly summarized as follows. It must be remembered that here the two chief aims are to get rid of surplus water and to secure the early maturity of the crop. A three-year rotation is usually practiced, two years in cane and one year in corn and cowpeas. After the second crop of cane is harvested the land is plowed and is planted to corn very early in the spring. At the last cultivation of the corn, cowpeas are broadcasted at the rate of one to three bushels per acre. After the corn is gathered these produce an immense mass of vegetation which together with the corn stalks are plowed under with a disk plow during the latter part of summer. In about four weeks the vines will have rotted enough so that the land can be bedded. This is done with a large two-horse turning plow, and the beds or ridges are thrown up about six to seven feet apart. These beds are crossed by quarter drains at sufficiently frequent intervals, which lead into the larger ditches and these in turn into large drainage canals, so that any excessive rainfall is quickly carried away. Planting begins about the first of October or as soon as the seed cane is sufficiently mature to insure good germination. Planting furrows are opened in the top of the ridges with a double moldboard plow, but this furrow should not be quite as deep as the water furrow between the rows. Two rows of seed cane are laid in the bottom of this furrow, which is then filled

in five or six inches deep by means of the disk cultivator. It is covered thus deeply to protect the seed cane from freezing during the winter. The cane is planted full length as it is found to keep better than when cut in short pieces. About four tons of seed cane are required per acre. Planting is usually interrupted at the beginning of the grinding season in November. On most plantations it is necessary to make spring plantings also. For this purpose seed cane must be carried over winter by the process known as windrowing. The cane cut from two rows is carefully piled in the water furrow between them in such a way that the stalks of one armful are completely covered by the tops of the next. the windrow is completed, only a continuous row of tops and leaves is visible. Furrows are now thrown from either side with large plows and the work of completely covering with dirt is finished with hoes.

In severe winters the windrowed cane is sometimes damaged so that a larger quantity of seed will be required to secure a stand. With the first warm days of spring the dirt is thrown from the sides of the beds with the plow and the greater part of the earth which covers the cane is scraped off with hoes. This lets in the warmth of the sun and promotes early germination. Fertilizer is now scattered in the side furrows and as soon as germination is completed the dirt is thrown back with a turning plow and the water furrows are cleaned out with the double moldboard plow. subsequent cultivation is all done with disk cultivators, which throw still more dirt to the rows, and with the Magnolia or some other similar form of cultivator for the water No hoeing is needed after the first scraping of the dirt from the seed canes. In fact even this is sometimes done with a special implement devised for the purpose. When the cane tops begin to meet between the rows, it is "laid by," by again cleaning the water furrows with the double moldboard and opening up the quarter drains, which should be six inches deeper than the bottom of the water furrows. After the harvest the land is left covered with a great accumulation of trash, consisting of the cane tops and leaves. This is burned over at the first suitable opportunity in order to kill the cane borer, but more particularly in order to prevent it from clogging the drains and water furrows and thus keeping the land too wet and cold during the winter. This is recognized as a great waste of fertility since so much vegetable matter is destroyed that ought to be reincorporated with the soil. Under these special conditions, however, its advantages are found to considerably outweigh its very obvious disadvantages. must be remembered that in this short rotation an abundant

supply of vegetable matter is returned to the soil every three years with the corn stalks and pea vines. The burning, too, clears the ground for the subsequent cultivation of the stubble cane. In the early spring an implement known as a stubble digger is passed over the rows to loosen up the ground between the stubbles. If the upper buds of the stubble have been injured by the winter, another implement, known as the stubble shaver, may first be passed over the row to cut off these injured tops below the surface of the ground. As soon as the stubbles begin to sprout the rows are barred off, fertilized, rebedded, and cultivated exactly like the plant cane.

The fertilizers used in Louisiana for cane are largely the phosphates though nitrogenous manures are also employed. Potash does not seem to be needed. This is probably to be explained by the well-known fact that the phosphates tend to hasten maturity, a point so important for Louisiana, while potash has the contrary effect of prolonging the period of vigorous growth.

Most unfortunately for the sugar-cane industry the harvesting as yet has to be done by hand. This requires a much larger force of laborers than the cultivation, and at the present time constitutes the most difficult problem that confronts the cane grower. A successful mechanical harvester is a great desideratum. The great weight of the crop to be handled and the fact that it is usually badly tangled by storms are serious obstacles to be overcome, but the worst difficulty is that judgment has to be used as to the height at which to top the cane in order not to waste it on the one hand by cutting too low or by cutting too high to include immature tops which carry impurities that prevent the crystallization of the sugar. Whether these difficulties can ever be successfully solved remains for the future to decide. A successful machine for cutting cane already exists and it is sometimes employed in windrowing, but ordinarily it is not found to have much advantage over hand cutting. There are now several fairly successful devices for loading cane into carts or wagons, after it is thrown in piles by the cutters and others for transferring it from carts to railroad cars and from the cars to the conveyor at the mill. It is thus seen that cutting and stripping are practically the only hand work remaining in the Louisiana cane fields.

LOUISIANA IN 1900

From William C. Stubbs, Rice, Preparation, Cultivation, Flooding, Harvesting, and Noxious Weeds in the Rice Fields, Bulletin of the Agricultural Experiment Station of the Louisiana State University and A. & M. College, Second Series, No. 61 (Baton Rouge: Board of Agriculture and Immigration, 1900), pp. 385-86.

#### CULTIVATION OF RICE

varies in different sections of the State and sometimes in different communities in the same section. The alluvial sections as a rule pursue an entirely different method from preparation of soil to the harvesting of the crop, to that followed by planter upon prairies.

### IN THE ALLUVIAL SECTIONS

The ditches for drainage run from the levees to the rear at distances of from 100 to 200 feet apart. As before mentioned, the land slopes gradually from the levees to the swamps. This slope, nowhere precipitous, yet varies in different fields. Cross embankments at intervals to suit this slope, are thrown up with a plow and perfected with the hoe so as to hold back water enough to cover the plants in the upper part of the plat. These embankments cross the old ditches with either plank or earth dams. The size of the plats thus made by the ditches and cross embankments varies with slope of the land and distance between ditches. Usually they are too small to permit of the successful handling of improved machinery in harvesting the crop.

Two methods of preparing the soil are followed, known as the "dry" and the "wet". In the former the lands are plowed in the fall and winter and thoroughly harrowed and seed sown broadcast (or with drill) and harrowed in, similar to planting of oats or wheat. The seed is usually sown in the last days of March or early in April.

In wet culture the fields are flooded and plowed in water. The rice is sown and harrowed in the wet. The water is then withdrawn to permit the rice to germinate.

sowing made directly after plowing is usually done in April or in May. Care must be exercised to went the young plants from scalding by the sun at this late period. This custom is practiced by those planters cultivate black or buckshot clays, because after etting the soil an ordinary pair of mules can break the land, whereas if dry it will require a four or six mule team for the same work. However, wet culture has many difficulties unless carefully and judiciously performed.

After the plants are up the ground is gradually moistened and the water kept just a little below the tops of the plant until the latter has obtained a good size, when the field is flooded from six to twelve inches deep and kept so until ready for harvest, unless some other disaster overtakes the crop. Should weeds and grass abound they are either pulled out by hand or they are scythed down with the rice, and by flooding, the former are checked or killed and the latter pushed into vigor. During growth a constant but imperceptible flow of water is kept going through the fields. When harvest approaches the water is withdrawn and pumps stopped. The water is now, by law, drawn over levees through syphons, which during high water work automatically, dispensing with expense of a pump.

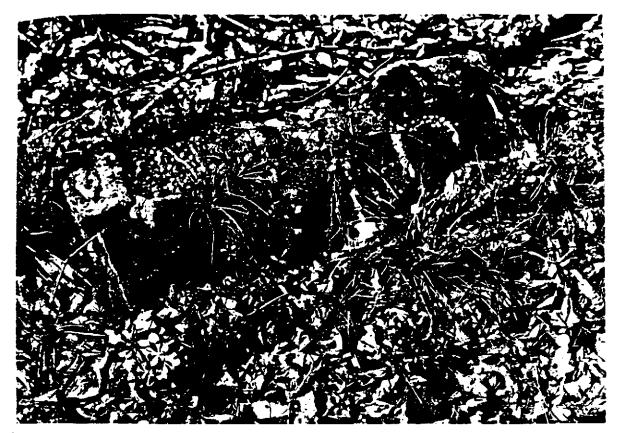
Harvest usually takes place on the river in August. The rice is cut by hand with sickles, laid upon the stubble to cure and afterwards bound into sheaves and put into shocks, where they remain until hauled to the thresher. Improved implements for planting and harvesting the crop have been tried in the alluvial sections, but have not been generally adopted, due to reasons already assigned. The plowing is usually from four to six inches deep, and a sack of 162 pounds of seed is planted on from two and a half to three and a half acres.



Live oaks and saplings on the site of Christmas Plantation barn la. looking SE. 3/86.



Horseshee embedded in a split and fallen tree at Christmas Plantation barn site la. 3/86.



Brick structural remnant of the Christmas Plantation house site le. 2/86.



Brick structural remnant in the roots of a tree. Christmas Plantation house site le. 2/86.



Shell road or railroad bed bordering the "Old Derrick Road," looking N. 3/86.



Brick, shell, and an iron spike at the possible site of the Christmas Plantation windlass cane derrick (4, map of Cultural Features of the Christmas Plantation). 3/86.

BRICKS, BRICKS.

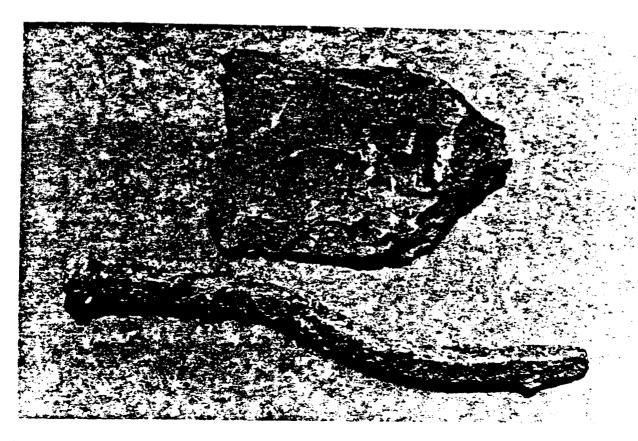
## HARVEY'S CANAL BRICK

Manufactory.

(Established by J. H. HARVEY in 1848.)

Bricks delivered in quanities to suit by New Orleans Pacific or Morgan's Louisiana and Texas R. R.; also in barges to plantations. Address only Mrs. Louise Harvy, 55 Prytania St., or box 30, Mechanics', Dealers' & Lumbermen's Exchange. These bricks are manufactured from the clay excavated from the Harvey Canal, and are much stronger than those made from the annual Mississippi deposit, as they will not disintegrate from damp or saline atmosphere.

Advertisement, L. Bouchereau, Statement of the Sugar and Rice Crops Made in Louisiana. (New Orleans: Young, Bright & Co., 1881-2), p. xiv.

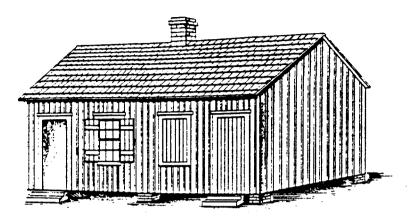


Iron spike and piece of "H" imprinted brick from possible site of the Christmas Plantation windlass cane derrick (4, map of Cultural Features of the Christmas Plantation).



The Shell Road. Looking SW toward bayou. 4/85.

### PLANTATION CABINS,



The above represents a Double Cabin of two rooms, each 14 by 15 feet, 10 feet high, built with boards placed upright and the joints stripped, the doors and shutters are hung and fitted with locks, etc., and the windows fitted with glazed sash. This Cabin contains about 3000 feet of lumber and 3500 shingles. Delivered to Boat, including all Hardware, Nails, Shingles, etc., (except foundations and chimney.)

The following are the most common sizes, but we will get out any size required:

#### DOUBLE CABINS.

- 2 Rooms, each 14 feet by 14 feet.
- 2 Rooms, each 14 feet by 15 feet.
- 2 Rooms, each 15 feet by 15 feet.
- 2 Rooms, each 15 feet by 16 feet.
- 2 Rooms, each 16 feet by 16 feet.
- 2 Rooms, each 16 feet by 18 feet.

### SINGLE

1 Room, - - 14 feet by 14 feet. 1 Room, - - 14 feet by 15 feet.

1 Room, - - 15 feet by 15 feet.

1 Room, - - 15 feet by 16 feet.

1 Room, - - 16 feet by 16 feet.

1 Room, - - 16 feet by 18 feet.

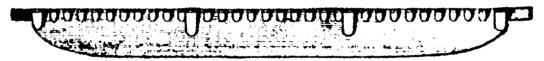
For Price of above Cabins address, or call on us at our Factory 299, 301, 303, 305 & 307 Gravier Street, or at our Branch Office, No. 52 Carondelet Street, New Orleans.

# WOOD & EVANS' GRATE BAR.

Office, No. 2 Canal Street,

NEW ORLEANS, LA.

STATIONARY BAR.



Patented May 27th, 1890.

This Bar will burn Slack, Nut and all kinds of coal with a saving of from 10 to 20 per cent. Recommeded to Sugar Planters as well as all Steam Boats, especially for burning Slack and Nut Coal.

TO STEAM USERS IN GENERAL.

Advertisement, L. Bouchereau, Statement of the Sugar and Rice Crops Made in Louisiana. (New Orleans: Young, Bright & Co., 1889-92), p. S.

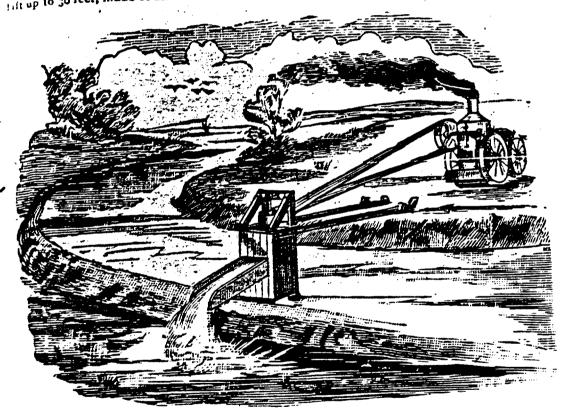


Cast-iron grate bar from the furnace of a plantation sugar refinery, used as a boundary marker at the lower front corner of the east bank Pablo Suárez Ruiz tract. 3/86.

### MENGE'S

# Patent Prainage and Freigating Machines.

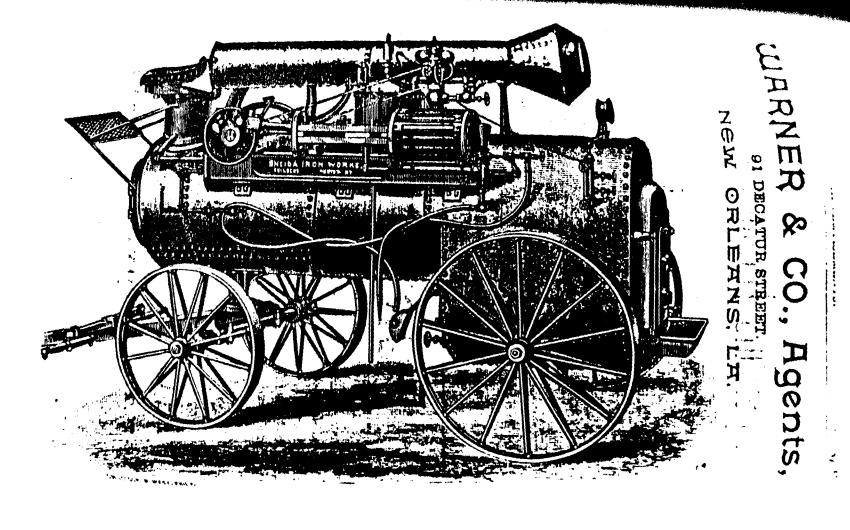
Two kinds made for low lift up to 8 feet wooden frame box, 2s shown in cut; for high lift up to 30 feet, made of all iron with suction and discharge pipe.



Advertisement, L. Bouchereau, Statement of the Sugar and Rice Crops Made in Louisiana. (New Orleans: Young, Bright & Co., 1885-6), p. xxi.



Frick foundation on the south bank of the Christmas Plantation main sutfall ditch, which probably supported a steam engine that operated the pump that was located in the ditch. Looking NW. 2/86. See map of Cultural Features of the Christmas Plantation.)

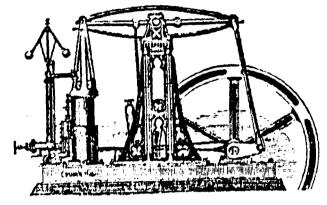


Advertisement, L. Bouchereau, Statement of the Sugar and Rice Crops Made in Louisiana. (New Orleans: Young, Bright & Co., 1889, 90), p. 37b.

# EEEDS' FOUNDRY,

(Established in 1825.)

Cor. Delord and Foucher Sts.,



WE ARE PREPARED TO MANUFACTURE

### Steam Engines, Boilers, SUAR MILLS, SUGAR KITTLES, Draining Machines, Saw Mills, COTTON PRESSES,

Newell Screws, hin hearing, Jurnace Mouths,

Grate BARS, Judson's GOVERNORS,

### Plantation & Steamboat Works,

AND EVERY DESCRIPTION OF

Machinery for the South.

LEEDS & CO.

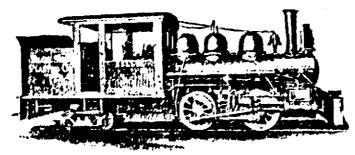
CF Orders left at Box 73, Mechanics' and Dealers' Exchange, will receive prompt attention

Advertisement, L. Bouchereau, Statement of the Sugar and Rice Crops Made in Louisiana. (New Orleans: Young, Bright & Co., 1870), n.p.

# Davenport Locomotive Works

DAVENPORT, IOWA

DAVLOCO

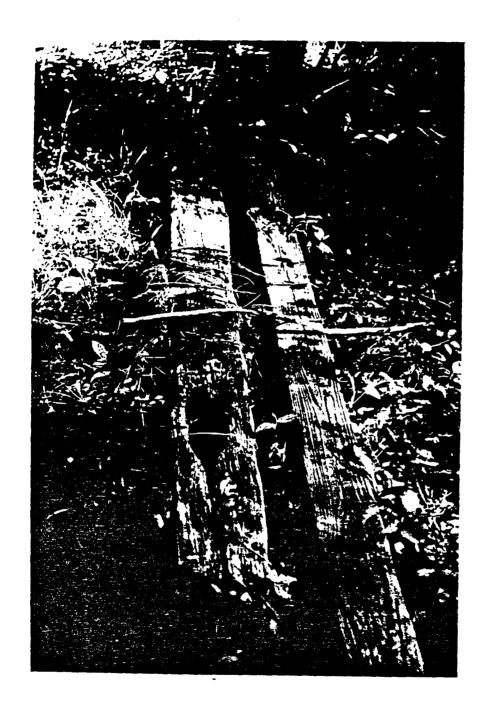


PLANTATION LOCOMOTIVES Our Specialty

Any Gauge—Any Size—Any Design
We understand the conditions and build to meet them
Special Locomotives for Special Purposes

Southern Agent—Louis Kaufman, Godchaux Bidg., New Otleans. La.

Advertisement, L. Bouchereau, Statement of the Sugar and Rice Crops Made in Louisiana. (New Orleans: Young, Bright & Co., 1902-3), p. 286.



Hand-cut railroad tie probably from the Christmas Plantation Rail-road, used as part of a barbed-wire fence along the west side of Third Road to contain cattle, and taken down by the NDC 1000

### LAGAN & MACKISON,

Nos. 6 & 8 Common Street,

### NEW ORLEANS.

- MANUFACTURERS OF -

COPPER, SHEET IRON AND BRASS WORK.

--- ALSO DEALERS IN ---

WROUGHT IRON PIPES and BOILER TUBES,

MALLEABLE and CAST IRON FITTINGS,

COPPER and BRASS Seamless TUBING of all Sizes.

Have on hand, and are constantly receiving, a full Assortment of GLOBE, ANGLE, SAFETY and WASH VALVES,

HOSE COUPLINGS, STRAPS and NOZZLES,
Pure and Sheet GUM, Round and Square PACKING,
HOSE AND GASKETS OF ALL SIZES.

- We Manufacture the most -

### IMPROVED AND ECONOMICAL STEAM TRAINS

for the evaporation of Cane Juice, both in Copper and Iron,

Sheet Iron Tanks, Juice Boxes & Sulphur Furnaces.

- WE ARE AGENTS-

For all the best PATENT SYPHONS in use for throwing water and and cane juice; They are preferable to Steam Pumps,

WHICH COST SIX TIMES THEIR PRICE,

and do not perform equal service.

We call attention to our great facilities for

### STEAMBOAT AND STEAMSHIP WORK.

and respectfully solicit orders, which will be executed to perfection, and with dispatch,

And we distinctly Guarantee as not to be Excelled.

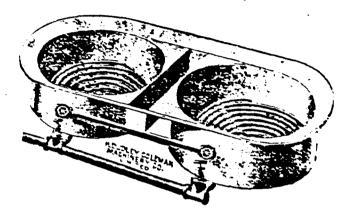
ALL WORK DONE AT OUR ESTABLISHMENT

Advertisement, L. Bouchereau, Statement of the Sugar and Rice Crops Made in Louisiana. (New Orleans: Young, Bright & Co., 1881-2), p. xxiv.

# H. Dudley Coleman Machinery Co.

LIMITED

NEW ORLEANS, LA.



WE MAKE A SPECIALTY OF

# Sugar Machinery

WE SOLICIT ORDERS FOR

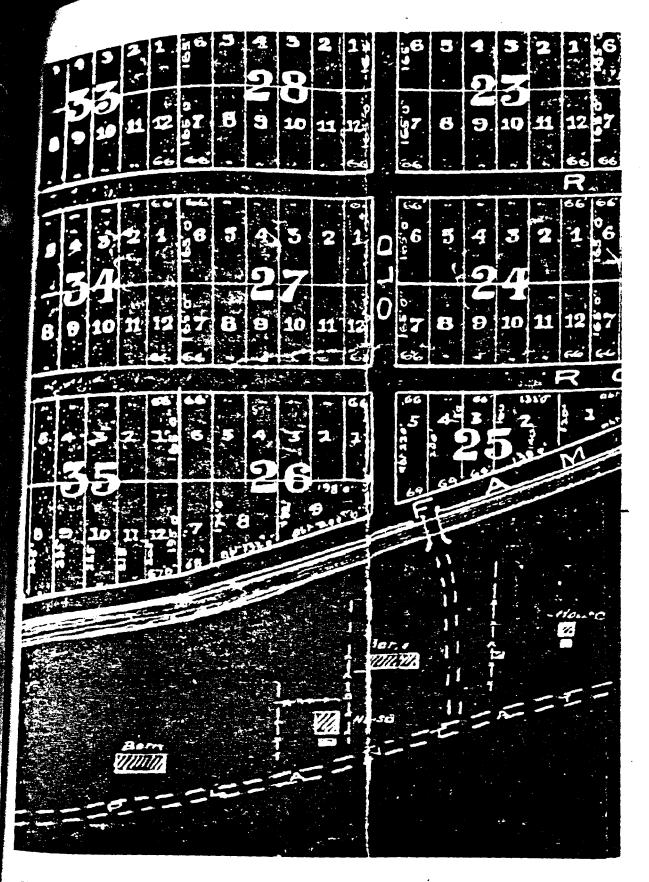
## Anything or Everything

FROM THE CANE CARRIER TO THE PACKING ROOM.

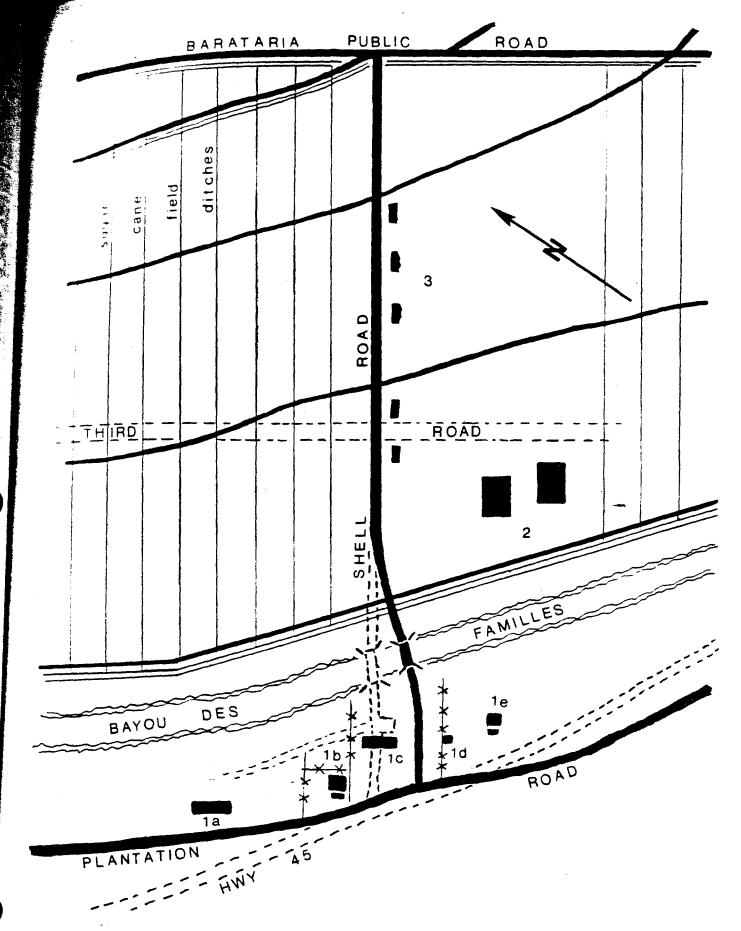
## WE REFER TO THOSE

WHO HAVE PATRONIZED US

Advertisement, L. Bouchereau, Statement of the Sugar and Rice Crops Made in Louisiana. (New Orleans: Young, Bright & Co., 1893-4), p. A.



M. Stephens, "Map of Property of the Jefferson Land Company," March, 1910. Detail showing buildings of the Christmas Plantation and the plantation roads and bridge over Bayou des Familles.



Christmas Plantation Headquarters area. Positions of east bank buildings are approximate. Dashed lines represent post-plantation features. Scale: l inch = 300 feet.

#### STRUCTURES ON THE CHRISTMAS PLANTATION

Records indicate that a series of buildings and structures erected on the Christmas Plantation during the half-century the plantation was in operation. The identity and location some of these structures have been documented. Future archival and archaeological work may identify and position other clantation structures.

Excepting roads, buildings and improvements are not mentioned in the acts of sale by which Rufus King Cutler and Pierre Ernest Beauvais purchased the original property tracts in 1865 and 1866 from Marie Julie Gabrielle Lemoine, widow of Pierre Rochefort.

A Jefferson Parish Mortgage Office certificate attached to the 1865 sale states that buildings were present on the 20-by-100-arpent "portion of ground or plantation" out of which the Christmas property was subdivided and sold by the widow Rochefort.

The buildings were likely to have been located along the frontage of the Rochefort property which faced Bayou Barataria. 21

Buildings had apparently been erected on the Christmas Plantation by October, 1866, when Cutler sold his undivided half of the property to Beauvais with all the "singular improvements thereon, the rights, ways, servitudes and privileges thereto belonging, of all the machinery, instruments, mules, wagons, carts, cattle, boats, edged tools, fowls and all materials and things and farming apparatus belonging to said land known as the 'Christmas Plantation.'" Sugar production began on the plantation with a portable sugar mill housed in a wooden structure. Records do not specify the location of the mill. It may have

peen operated by mule power. From the cane crop of 1869-70, the portable mill produced 55 hogsheads of sugar weighing and 5,800 gallons of molasses. 22

15

In 1869-70, the Christmas Plantation sugarhouse was installed with steam apparatus and open kettles by the New Orleans firm of Lagan and Mackison at a cost of \$3,296.99. The machinery was made by the W. Golding Iron Foundry and the Leeds and Company Iron Foundry. In 1872, additional equipment for the sugarhouse was purchased from the iron foundry of Shakespeare, Smith and Company. 23

The sugar-making equipment was mounted in a brick structure having a wood-burning furnace and a tall brick chimney. The sugarhouse that enclosed this assemblage was made of wood. The precise position of the sugarhouse is not documented, however, records show that it was located on the east side of Bayou des Familles. It was probably located in the vicinity of the present-day Shell Road, also known as the Old Road and the Christmas Road, where the plantation buildings are shown on later maps. 24

A bankruptcy sale of 1876 described the improvements on the plantation as consisting of "one dwelling house, one sugar-house and eight other buildings for quarters, stables, cane shed, one water cistern, etc. The sugarhouse and cane shed contain one steam engine, one sugar mill of six hogsheads a day capacity, two sets of steam boilers, ten steam clarifiers, four settling tubs, one iron evaporator, three syrup settling tubs, one copper strike pan, two centrifugals, one molasses cistern,

Lilie . Bought of LAGAN & MACKISON. Hardware and Ship Chundlery, WORKERS IN COPPER, BRASS AND SERVE INCH Doulors in Gas Piper and Pittings. HOL & & F COMMON STREET. 10 mill de m Gueling = 26 Bolt rauta cof 15 Markers (20 1 Sall larms
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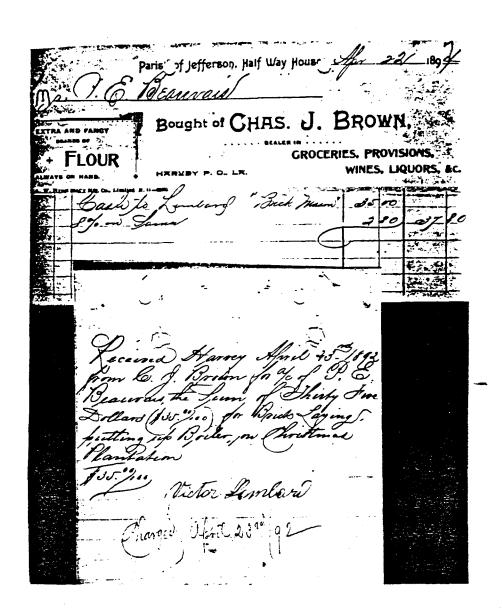
Bill to P. E. Beauvais from Lagan and Mackison for labor and materials furnished in making repairs and fitting up machinery in the sugarhouse on the Beauvais Place, January 1, 1870. Lagan and Mackinson vs. P. E. Beauvais, Second Judicial District Court, Docket No. 3984, April 19, 1872, Jefferson Parish Old Judicial Records, Gretna.

trike box car, fifteen coolers, draining floor for seventy and condition; also a circular saw attachment, a complete set of plows, harrows, cross cut saws, and all necessary agricultural implements, five carts with harnesses, five mules, a stack of hay, and a lot of sweet potatoes estimated a two hundred and fifty barrels." 25

The sugarhouse burned in 1885. The plantation was apparently then used to grow rice, and a rice thresher may have been installed on the property. 26

In 1892, another sugarhouse may have been built on the Christmas Plantation. In that year, brick laying for a boiler and the installation of the boiler were done by Victor Lombard, a brick mason who lived in McDonoghville. However, rice continued to be grown on the plantation, and the boiler may have been used to pump water to flood the fields. By the turn-of-thecentury, sugar cane was again being grown, but the cane was being transported by railroad to a neighboring plantation to be milled. 27

The "New Orleans, La." U. S. G. S. quadrangle map (scale 1:62,500, surveyed in 1890, edition of November 1891, reprinted in October 1898) shows the buildings of the Christmas Plantation clustered near the present-day Shell Road, on both sides of Bayou des Familles. Typically, U. S. G. S. quadrangle maps do not show all existing buildings and a larger number of structures were probably actually present in the complex. Five buildings that were undoubtedly the laborers' quarters line the south side



Payment by C. J. Brown c/o P. E. Beauvais to Victor Lombard, Brick Mason, for putting up boiler on the Christmas Plantation, April 22, 1892. Charles J. Brown vs. Pierre E. Beauvais, 21st Judicial District Court, Docket No. 251, January 14, 1895, Jefferson Parish Old Judicial Records, Gretna.

Two larger buildings are located at the southwest of the juncture of the road and the bayou. Apparently, the of these buildings was the main dwelling house. Earlier, would have been the likely location for the sugarhouse. Unother building is positioned on the opposite side of the bayou. This building was apparently a stable. These buildings are described as being in these locations in an agreement by Charles J. Brown to deliver his property to the Southside Plantation Company to plant cane in 1901:

The general direction of the Cane Field is Northwest to Southeast; the Barataria or Public Road running along the Northeasterly side of the field; about midway in the field and running in the same direction is the Bayou des Familles; the greater part of the Quarters is centrally located on the North side of the Bayou as is also the Plantation Residence; on the South side of the Bayou are the stable and a few cabins; the railroad track leading from the South Side Plantation to the Christmas Plantation enters the cane field of the latter property near the Northwesterly corner and extends in the Christmas Plantation about one thousand feet from where the track crosses the Public Road. 28

Also on the property were twenty-two mules and several carts, as well as

four Planet Jr. cultivators; three pea-vine cutters; one portable boiler and engine, Harrisburg Make; one thirty-six-inch Menge pump; ten assorted Avery plows; one cane derrick; one horse power hoist; all harnesses and parts of harnesses; all other property necessary for the proper cultivation of the crops including buildings, fences, etc. 29

The Menge pump may have been situated in the vicinity of brick masonry work that straddles the main outfall ditch about 2350 feet upstream from the Shell Road. The brick remains are

The larger portion of the foundation appears from surne observation to be located on the south side of the ditch.

In all, the brick remains appear to cover an area measuring

arout 45 feet by 18 feet. (See No. 6 on map of Cultural Features
the Christmas Plantation.)

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It is possible that the brickwork once supported a wooden waterwheel that helped to drain the fields. However, records show that a pump was in use in the 1890s to flood the rice fields, and this was probably the Menge pump described above. 30

"Menge's Patent Drainage and Irrigating Machines" were advertised in the 1880s and 1890s as being several kinds having \*a Capacity of from Fifty Thousand to Ten Million Gallons an hour." The working parts were made of iron and the frame and walls were of wood. The pumps had the appearance of rectangular boxes and were installed in the water. A vertical shaft turned a horizontal wheel which was located in the bottom of the box below the water line. Water thrown up into the box by the wheel was discharged through a flume. The vertical shaft was connected by a pulley to a steam engine situated on land nearby. Frequently, a portable steam engine on wheels was used to power the pump. For protection against weather, the engines were sometimes enclosed in a small wooden building with a metal smokestack. The masonry on the main outfall ditch may have served as the foundation and floor of a building to contain the Harrisburg portable boiler and engine that is described above. However,

reactional investigation is necessary to attempt to investigate investigation is necessary to attempt to investigated investigated archaeologically. 31

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When the Christmas Plantation was sold by Charles J. Brown to George H. T. Shaw in 1903, it was sold with the buildings and "eighteen head of mules, thirteen plows, two cultivators, two stubble diggers, five mule carts, one 3 ft. Menge Pump, one 12 Horse Power Engine, one Dump Cart and one Windlass Derrick." The windlass derrick had been used to load came into the railroad cars for transportation to the mill of neighboring Estelle Plantation. The derrick was located near what is called the "Old Derrick Road," which is presumed to be the old railroad bed. The probable location of the cane derrick is a raised area about 150 feet square which is scattered with Rangia shell and brick fragments. An iron spike was also found on this site. The site is located at the termination of a 15-foot-wide shell road bed which is raised nearly a foot in height and runs for 950 feet southwest of the NPS trail juncture sign on the Big Woods Trail (the Old Barataria Public Road). The shell road bed could have also been a railroad bed. (See No. 4 on map of Cultural Features of the Christmas Plantation.) The presumed site of the windlass cane derrick, the shell road bed, and the "Old Derrick Road" should be investigated archaeologically to attempt to verify their uses. 32

According to Frank Ehret, Jr. and Louis Ehret, large pieces of rusted sheet metal were lying about near this site prior to World War II when they were collected for the metal drives. One brick fragment on this site was noted to be imprinted with the letter "H." Whole bricks bearing the letter "H" are found in the plantation headquarters area. These bricks were probably produced by the Harvey's Canal Brick Manufactory which had been established by Joseph Hale Harvey in 1848 and which was later operated by his wife Louise Destrehan Harvey. An advertisement for the bricks announced that they were delivered in barges to plantations. The ad further stated that

These bricks are manufactured from the clay excavated from the Harvey Canal, and are much stronger than those made from the annual Mississippi deposit, as they will not disintegrate from damp or saline atmosphere. 33

Both bricks imprinted with an "H" and plain bricks located on probable Christmas Plantation building sites are hard in consistency and deep red in color. The same "H" imprinted bricks can be found in the Berthoud Cemetery on Bayou Barataria. An example of the sale of Harvey bricks to a Barataria plantation is a contract in the Jefferson Parish Courthouse by which Louise Destrehan Harvey sold Jonathan Davis 300,000 bricks for the sugarhouse on his Barataria plantation in 1862. The bricks were priced at \$8.00 per 1.000.34

A final source of documentation on the buildings and structures of the Christmas Plantation is the map made by M. Stephens in 1910 of the subdivision of the property east of

Dayou des Familles into streets and lots for the Jefferson Land Company. The plantation buildings standing in 1910 on the west bank of Bayou des Familles are shown on this map, as are some plantation roads and bridges. 35

Based on the above documentation, the probable building sites located during field survey of the headquarters area of the Christmas Plantation are described below. The site numbers correspond with the maps drafted for this study which show the cultural features of the Christmas Plantation. Archaeological investigation is needed to attempt to actually determine the identity and location of the structures. Other Christmas Plantation structures may have also existed in the

la. Barn site. The site is located between 400 and 500 feet NW of the junction of the Shell Road and Highway 45, and about 150 feet NE of the highway. The barn is shown located in this position on the 1910 subdivision map and is shown as being about 100 feet long by about 40 feet wide.

Among the surface artifacts are brick and board fragments, barbed wire and mesh wire fencing, Rangia shell, an old axle, and other rusted metal items. A fallen tree which has split open holds a horseshoe which became embedded in the tree when it was growing. A notable feature of the site is a hole in the ground measuring about ten feet in diameter and about two deep. In the hole are rotten wood beams which are part-covered with tin.

Another scattering of brick and board fragments is located about 335 feet NW of the Shell Road, near two large live oak trees. A shell road that runs through this area appears on 1945 aerial photographs and may date back to the plantation period. Aerial photographs from 1945 through the 1970s show other buildings located near the barn site. Some artifact scatter and some of the ground features in this area may have been associated with these buildings. Later buildings on the site could have reused materials from buildings of the plantation period.

The 1910 subdivision map shows that the "Plantation Road" on the west bank of Bayou des Familles ran on the west side he barn. In this approximate position, near the highway, is a raised linear feature about 20 feet wide with ditches on both sides. This could be the old Plantation Road bed.

lb. House site. The site is located about 75 feet NW of the junction of the Shell Road and Highway 45, and about 60 feet NE of the highway. A house is shown on the 1910 subdivision map as being located in this position, facing the bayou with a separate kitchen building in the rear. Together, the two buildings are shown on the map as covering an area measuring about 75 by 50 feet. The house is shown as square in plan. and it was probably a Creole cottage type. The kitchen is shown as rectangular in plan. The map shows that the buildings artially enclosed by a fence. Near the bayou, a wire seek fence is located in the position of one fence line shown the map.

Surface artifacts on the site include brick and board fragments, and Rangia shell, most of which are located at the base of a large live oak tree that once shaded the house. An aerial photograph of 1945 shows a house located on the NW side of the oak tree. This house, which was destroyed in the 1950s, may have been the same house shown on the 1910 map, however it does not appear to have been in the precise location. If the houses were not one and the same, some artifact material scattered near the oak tree probably derived from the second house. 36

neasuring about 35 feet long by about 100 feet long was positioned a sthe present route of the Shell Road, about 150 feet from Highway 45. At some time after the laying out of the subdivision, the Shell Road was extended directly across the bayou to connect with the road on the west bank of the bayou. Probably at that time, the barn was demolished. Construction of the road seems to have destroyed surface evidence of the barn. Archaeological investigation may reveal subsurface evidence of the structure.

Mall unidentified building sided by a fence located 220 feet of the present-day Shell Road and about 100 feet NE of the ghway.

The site contains scattered debris, much of which can be ed as recent. An old wooden shed stood on or near the until recently demolished by the NPS. This shed may not

have been the small building shown on the 1910 map. Part of a wire mesh fence is located in the position of the fence line shown on the map. The fence runs into the slough beside the highway.

house with rectangular kitchen at the rear located about 350 feet SE of the present-day Shell Road. Measuring along present-day Highway 45, the site is about 420 feet SE of the junction of the Shell Road and the highway. The rear of the kitchen was located about 75 feet NE of the highway, near a slough that runs beside the highway. The house faced the bayou.

The site has been disturbed by earth moving. Large pieces of brick masonry protrude at angles from the ground. The roots of trees grow over some of the masonry. Also present on the site are Rangia shell, broken fragments of rotten boards, broken bricks, and pieces of metal and wire. On the 1910 map, the two buildings cover an area measuring about 40 by 60 feet. However, the remains of the buildings appear to cover a larger area.

The 1901 description of the Christmas Plantation, quoted above, appears to locate the main dwelling house on the east side of Bayou des Familles. The houses on the west side of the bayou may have then been used to house sharecroppers or family members, and they may have been originally built for these oses. However, it may be speculated that the two houses on the west bank of the bayou were the original plantation homes built by the partners Rufus King Cutler and Pierre Ernest

Beauvais in 1866. Archaeological investigation may help to date the buildings that stood on the sites.

The layout of pre-Civil War plantation building complexes usually followed a pattern that was developed as a result of the institution of slavery. Regimented rows of slave quarters were closely grouped for security, within view but distant from the master house, and distant from the vegetable garden, chicken house, dovecotes, and storehouses. The slaves were housed near the fields and the sugarhouse so that they might quickly go to and from their work. The overseer's house was frequently located near the slave quarters so that he might closely watch slaves.—Slaves and barn animals were usually situated to the north of the master house to avoid unpleasant smells that might be carried on warm southern winds. The master house was set apart from the other buildings in an ornamental garden facing the river or bayou and the main road. 37

After the Civil War, the status of the plantation owner and his relationships to his hired hands, whether white or black, changed. As a consequence, some changes were made in the arrangement of buildings on plantations. Archaeological investigation of the layout of buildings on the Christmas Plantation might add to the knowledge of both social and technological changes that occurred on post-Civil War plantations.

It may be conjectured that the houses on the west bank of Bayou des Familles were built as homes for the plantation owners because they were set apart from the fields, industry, and

laborers' quarters on the east bank. By the turn-of-the-century, however, the houses shared the elevated west bank natural levee with barns, and the main dwelling house appears to have shared the east bank of the bayou with the hired hands' quarters.

Possible sugarhouse site and/or possible main dwelling house 2. site. This site encompasses an area measuring about 600 feet square at the SE junction of the Shell Road and Bayou des Familles. As previously mentioned, the documentation suggests that the sugarhouse and cane shed may have been located in this area, at least from 1869 to 1885 when the sugarhouse burned. Another sugarhouse may have been built, but the documentation is onclusive. The U. S. G. S. "New Orleans, La." quadrangle map, which was made from an 1890 survey, shows two large buildings located here. The 1901 description of the plantation, quoted above, seems to indicate that the main dwelling house was, at that time, located on the east side of the bayou. Archaeological investigation may show if the site served one or both of these purposes. Maps drafted for this study show the approximate location of buildings that were apparently located on the site.

The ground in this area is artifically raised, shows signs of disturbance by earth-moving, and is littered with debris.

Much trash, including building materials, was removed from this area by the NPS during clean-up operations. All of the rubbish observed being removed during field work for this study appeared be of recent date. However, park personnel believe that some earlier remains of buildings, furnishings, and farming equipment

were also removed. Because the area near the Shell Road crossing of Bayou des Familles was used as a dump in recent years, it is difficult to attribute the origin of surface materials to buildings that once existed on the site.

Nevertheless, much debris also lies under the ground.

Holes dug one or two feet deep by wild animals show that the subsurface contains brick fragments, Rangia shell, wire, iron hinges, pieces of sheet metal, and other metal objects. Such materials are also scattered on the surface. A number of whole bricks are strewn about. The bricks are hard in consistancy, deep red in color, and many are imprinted with the letter "H."

Some of these bricks have been collected and stacked in a pile.

Some brick rubble is located in the field ditches to the south of the site. None of the bricks observed appeared to date from the Colonial Period.

Aerial photographs of 1945 show that this entire area was planted as pecan orchard. Aerial photographs of the 1960s and 1970s show two small buildings facing the Shell Road on the south side of the road and near Bayou des Familles. A third building was located 200 or 300 feet farther to the south, behind the buildings facing the road. Aerial photographs appear to show that this last building was demolished in the early 1970s. Much of the debris in this area probably derived from the demolition of these structures. It is possible that recent structures reused bricks and other materials remaining from Constructions of the plantation period.

3. Laborers' quarters site. The U. S. G. S. "New Orleans, La." quadrangle map, surveyed in 1890, shows five small buildings facing the south side of the Shell Road which was the Christmas Plantation headquarters road. These small buildings were undoubtedly the laborers' cabins, and there may have been more than five buildings in the row. The 1901 description of the plantation, quoted above, appears to place the laborers' quarters on the east side of Bayou des Familles. The approximate location of the row of cabins is shown on maps drafted for this study.

The cabins probably resembled the type of quarters building most often found on late nineteenth century Louisiana plantations. Typically, these were rectangular cabins with gabled ends and a central brick chimney that served a double fireplace. This type of cabin usually contained two rooms and was raised on low brick piers. The front facade usually contained two doors and two windows fitted with glazed sash windows and board-and-batten shutters. These may have been the only openings in the building. The wood-frame structure was sided with vertial or horizontal weather boards and was roofed with wooden shingles or sheet metal.<sup>38</sup>

By the last quarter of the nineteenth century, prefabricated cabins of this design could be mail ordered from lumber companies in New Orleans. The simple building form originated as a slave quarter type and examples survive in the country, in towns and villages, and on the streets of New Orleans' older calchorhoods.

Small Creole cottage types were also popular for laborers' quarters, as they had been for slave quarters before the Civil It is assumed, however, that the simplier quarters type described above was the type that housed hired hands on the Chistmas Plantation because such cabins remained on the property until the mid-twentieth century. According to Louis Ehret, who frequented the area between 1912 and 1930, a row of these cabins was located on the west bank of Bayou des Familles, northwest of the crossing to the Shell Road and about 100 feet from the bayou. The buildings faced the bayou and were occupied by moss pickers. Aerial photographs of 1945 appear to show that one of these cabins was still standing at that time. Broken bricks and other surface artifacts in this area may remain from the demolition of these cabins. buildings may have been the the laborers' quarters that originally stood along the plantation headquarters road, and they may have been moved to the west bank of the bayou after 1910 in order to clear the east bank for the laying out of the subdivision the planting of the pecan orchard. An archaeological investi-Ration should be conducted of the cabin row sites on both sides of the bayou. 40

The original site of the laborers' quarters on the south side of the plantation headquarters road (the Shell Road) consists of a linear rise in the ground, about 20 feet wide, one or eet high, and about 700 feet long. It is located on the

south side of the drainage ditch that borders the south side of the Shell Road. The linear character of the site has the appearance of an old road bed. It is larger than any surrounding agricultural features and is not duplicated beside the drainage ditch on the north side of the Shell Road. However, it served as a bed for one of the pecan orchard rows. The larger size of the bed may be due to the debris from the laborers' quarters that it apparently contains.

A metal detector was used along much of the length of the site in order to better determine the nature of the raised linear feature. Metal artifacts found barely under the surface of the soil included a typical nineteenth century wroughtron strap hinge measuring about 12 inches long and 1½ inches wide, and part of a cast-iron stove front. Also scattered along the linear rise are broken bricks having the same color and consistency as those found on other sites associated with the Christmas Plantation, broken glass, and thin, white ceramic sherds. One of these sherds appears to be the lip of a cup and bears a scalloped pattern. Scattered bricks are also located about 100 feet southeast of the linear rise and about 1000 feet southwest of the eastern Christmas Plantation property line.

The linear rise is also scattered with occasional clam and oyster shells; large, round, bent nails; wire; and soft drink cans. Being adjacent to the road, trash has undoubtedly been thrown on the site for many years. Archaeological investigation is necessary to attempt to determine the extent of the site and the actual positions of the laborers' quarters. The row of

cabins may have extended along the plantation road to the intersection of the Barataria Public Road on the eastern property line of the Christmas Plantation. This area has been disturbed by oil exploration and, if the linear rise extended to the Public Road, it has been obliterated. However, the base of an old wine bottle and a crockery sherd were noted to have been exhumed at the mouth of an armadillo hole in this area. Future archaeological investigation should also bear in mind that the Spanish Period house site of Louis Pelteau may have been located in this area.

adquarters area are field ditches, some furrows and beds of the sugar cane fields, field roads, levees, and the bridge crossing approaches of the headquarters road at the bayou. As shown by the 1910 subdivision map, the bridge crossing was located about 100 feet downstream from the present bridge on the Shell Road. Although the road beds of the bridge approaches have subsided, they are still visible as raised linear features 15 or 20 feet wide. A dead oak tree stands at the edge of the bayou on the east bank bridge approach. Aerial photographs of 1945 show that the road leading from the east bank bridge crossing slanted toward the Shell Road. It apparently joined the route of the Shell Road a few hundred feet from the bayou.

The west bank bridge approach road that is shown on the 1910 map also appears in the 1945 aerial photographs. The raised road bed is visible today in several places on the ground as it curves toward Highway 45. Near the present highway, the

road joined the plantation road that ran along the west bank natural levee. In the slough that borders the east side of the highway, the position of the bridge approach road is marked by a cluster of willows and red maples, 100 feet southeast of the Shell Road.

In June, 1867, Pierre Ernest Beauvais received permission from the Jefferson Parish Police Jury to build a float bridge on Bayou des Familles. The bridge crossing at the plantation headquarters area, shown on the 1910 map, may have been the one built by Beauvais in 1867. Such float bridges were constructed of cypress logs laid on the water across the bayou and nailed together by planks laid cross wise. The bridge cossing site and road beds should be verified by archaeological investigations.

### **ENDNOTES**

## THE CHRISTMAS PLANTATION

- 1. Sale of land, Widow Pierre Rochefort to Rufus King Cutler and Pierre Ernest Beauvais, December 23, 1865, Edward G. Gottschalk, notary, NONA; Sale of land, widow Rochefort to Cutler and Beauvais, July 27, 1866, E. J. Gottschalk, notary, NONA.
- 2. Ibid.
- 3. J. A. d'Hémécourt, "Plan of 31 Valuable Tracts of Land Situated in the Parish of Jefferson, District of Barataria," November 3, 1865, Annexed to act of sale of land from Marie Julie Gabrielle Lemoine, Widow Pierre Rochefort, to Henry Chapron, November 11, 1865, E. J. Gottschalk, notary, NONA.
- 4. Joe Gray Taylor, Louisiana Reconstructed, 1863-1877 (Baton Rouge: Louisiana State University Press, 1974), pp. 44-45, pp. 48-49, pp. 54-55; R. King Cutler, Address (New Orleans: Rea's Steam Job Printing Office, August, 1865).
- . <u>Daily Picayune</u>, February 22, 1904, p. 6, c. 5; Sale of one undivided half of plantation, R. K. Cutler to P. E. Beauvais, November 5, 1866, E. J. Gottschalk, notary, NONA.
- Made in Louisiana (New Orleans: Young, Bright and Co., 1869-1884); Auction sale of property, Pierre E. Beauvais to the New Orleans National Banking Association, April 18, 1876, Andrew Hero, Jr., notary, NONA; Lease of plantation, New Orleans National Banking Association to William Coiler Beauvais, April 18, 1876, Andrew Hero, Jr., notary, NONA; Sale of property, New Orleans National Banking Association to Pierre E. Beauvais, March 8, 1879, Andrew Hero, Jr., notary, NONA.
- 7. Allen Begnaud, "The Louisiana Sugar Cane Industry: An Overview," in Green Fields: Two Hundred Years of Louisiana Sugar (Lafayette: University of Southwestern Louisiana, The Center for Louisiana Studies, 1980), pp. 38-44.
- 8. P. E. Beauvais contracts with Augustin Daspit and Julius M. Johnson, February 4, 1874 and March 8, 1874, C. Stringer, notary, NONA.
- Daily Picayune, February 22, 1904, p. 6, c. 5; ccession of William St. James Beauvais, 26th Judicial Parish Old Judicial Records, Gretna.

- 10. Public sale of land, John H. Carter to John A. Peel, August 4, 1875, G. W. Christy, notary, NONA; Peel to Byron M. Pond, August 4, 1875, G. W. Christy, notary, NONA; Pond to Commercial Firm of Bayly and Pond, January 6, 1876, F. Grima, notary, NONA; Bayly and Pond to Joseph H. Oglesby, December 18, 1877, Andrew Hero, Jr., notary, NONA; Oglesby NONA.
- 11. Sale of plantation, P. E. Beauvais to W. C. Beauvais, February 24, 1891, John Baptiste Lyman, notary, JPCH.
- 12. Bouchereau, Statement of the Sugar and Rice Crops, 1884-5; Mortgages, P. E. Beauvais to Charles Joseph Brown, December 13, 1890 and July 8, 1981, John Baptiste Lyman, notary, JPCH.
- 13. Alcee Fortier, Louisiana, vol. 3 (Chicago: Century Historical Association, 1914), pp. 492-93.
- 14. Charles J. Brown, vs. Pierre E. Beauvais, 21st Judicial District Court, January 14, 1895, Docket No. 251, Jefferson Parish Old Judicial Records, Gretna.
- 15. Ibid.
- 16. Lease to plant and cultivate rice, P. E. Beauvais to M. Robicheaux and G. Rome, June 15, 1891, John Baptiste Lyman, notary, JPCH.
- 17. Brown vs. Beauvais, Docket No. 251.
- 18. Sale of plantation, P. E. Beauvais to C. J. Brown, June 22, 1893, John Charles Tillotson, notary, JPCH; Dr. Charles Odom, interview with Betsy Swanson, 1986.
- 19. Brown mortgages, April 3, 1987, M.O.B. 36, folio 639; April 8, 1895, M.O.B. 36, folio 643; and December 12, 1898, M.O.B. 37, folio 514, JPCH; Contract to sell cane and build a railroad, C. J. Brown to Southside Plantation Company, July 19, 1899, M.O.B. 37, folio 757, JPCH.
- 20. Dr. Charles Odom, interview with Betsy Swanson, 1986; sale of plantation, Charles J. Brown to George H. T. Shaw, March 31, 1903, A W. Cooper, notary, NONA; Lease of plantation, George H. T. Shaw to Southside Plantation Company, March 31, 1903, A. W. Cooper, notary, NONA.

- 21. Sale of land, Widow Pierre Rochefort to Rufus King Cutler and Pierre Ernest Beauvais, December 23, 1865, Edward G. Gottschalk, notary, NONA; Sale of land, Widow Rochefort to Cutler and Beauvais, July 27, 1866, E. G. Gottschalk, notary, NONA.
- 22. Sale of half of property, Rufus King Cutler to Pierre Ernest Beauvais, October 5, 1866, E. G. Gottschalk, notary, NONA; L. Bouchereau, Statement of the Sugar and Rice Crops Made in Louisiana in 1869-70 (New Orleans: Young, Bright & Co., 1870), p. 38.
- 23. Mather D. Lagan and James Mackinson v. Pierre Ernest Beauvais, Second Judicial District Court of Jefferson Parish, Case No. 3984, April 19, 1872, Jefferson Parish Old Judicial Records Building, Gretna; MOB 26, f. 618-19, JPCH.
- 24. L. Bouchereau, Statement of the Sugar and Rice Crops Made in Louisiana in 1870-71 (New Orleans: Young, Bright & Co., 1871), p. 29; Contract to plant, Augustin Daspit to Peter E. Beauvais, February 4, 1874, Charles Stringer, notary, NONA; ntract to plant, P. E. Beauvais with J. M. Johnson, March 1874, Charles Stringer, notary, NONA.
- 25. Sale of property, Pierre E. Beauvais to New Orleans National Banking Association, April 1, 1876, Andrew Hero, notary, NONA.
- 26. Barbara Holmes, <u>Historic Resources Study</u>, <u>The Barataria Unit of Jean Lafitte National Historical Park</u>, Southwest Cultural Resources Center, Professional Papers No. 5 (Santa Fe: Division of History, Southwest Region, National Park Service, Department of the Interior, 1986), p. 80; P. E. Beauvais to Melancie Robicheaux and Gracien Rome, Lease to plant and cultivate rice, June 15, 1891, John Baptiste Lyman, notary, JPCH.
- 27. Charles J. Brown v. Pierre E. Beauvais, 21st Judicial District Court, Case No. 251, January 14, 1895, Jefferson Parish Old Judicial Records Building, Gretna; L. Soards, Soards' New Orleans City Directory (New Orleans: L. Soards, Publisher, 1892; Contracts between Southside Plantation Company and Charles J. Brown, July 15, 1899 and February 23, 1900, W. R. Ker, notary, NONA.
- 28. A copy of the 1891 edition, reprinted 1898, "New Orleans, La." quadrangle map is housed in the LC/TUL; the same map was rinted uncharged in 1912 and in 1931, and copies of these tions are also housed in the LC/TUL. Agreement by Charles

- J. Brown to deliver the Christmas Plantation to Southside Plantation Company to plant cane, February 5, 1901, B. T. Walshe, notary, NONA.
- 29. Brown to Southside Plantation Company, February 5, 1901.
- 30. Barbara Holmes, <u>Historic Resource Study. The Barataria Unit</u>, Appendix C, National Register of Historic Places Nomination Form, Item 7, p. 4; Charles J. Brown v. Pierre E. Beauvais, Case No. 251.
- 31. The firm of Joseph Menge, who patented the Menge pump, was located on Union Street and later on Tchoupitoulas Street in New Orleans; the Menge Pump and Machinery Company Inc. is today located on North Arnoult Road in Metairie; see Menge Patent Pump, estate of Joseph Menge, Patentees, J. W. Westerfield, Manager, 631 Tchoupitoulas St., New Orleans, copy in LC/TUL; and L. Bouchereau, Statement of the Sugar and Rice Crops Made in Louisiana, 1884-5, p. xviii; 1885-6, p. xxi; 1889-90, p. Ia; 1890-92, n.p.
- 32. Sale of plantation, Charles J. Brown to George H. T. Shaw, March 31, 1903, A. W. Cooper, notary, NONA.
- Frank Ehret, Jr. and Louis Ehret, interviews with Betsy Swanson, 1986; L. Bouchereau, Statement of the Sugar and Rice Crops Made in Louisiana in 1881-2, p. xiv.
- 34. Contract for bricks between Mrs. Louise Destrehan, wife of Joseph Harvey, and Jonathan Davis, March 3, 1862, Edward Barnett, notary, JPCH.
- 35. M. Stephens, "Map of Property of the Jefferson Land Company in the Parish of Jefferson, Louisiana, for sale by Burton D. Hurd Co., 204 Dearborn Street, Chicago, Illinois," March, 1910, attached to act of February 10, 1911, Alexis Brian, notary, NONA.
- 36. According to Percy Prestenbach, Jr., the house was destroyed about 1953, interview with Betsy Swanson, 1986. The small rectangular buildings at the rear of the houses shown on the 1910 map are assumed to be kitchens because kitchens were historically so located in Louisiana for fear of fire; kitchens were always built at the rear of houses, therefore the houses shown on the 1910 map faced the bayou.
- 37. Plans and descriptions of pre-Civl War plantations in the Barataria Region can be found in Sally Kittredge Evans, rick Stielow, and Betsy Swanson, Grand Isle on the Gulf: An Barly History (Metairie, Louisiana: Jefferson Parish Historical Commission, 1979), pp. 34-49, and Betsy Swanson, Historic Jefferson Parish (Gretna, Louisiana: Pelican Publishing Company, 1975), pp. 152-53, p. 160.

38. William C. Bell, comp., Roberts and Company Illustrated Catalogue of Mouldings, Architectural and Ornamental Woodwork (New Orleans: New Orleans Lithography & Engraving Co., 1880), p. 84, SCD/TUL; L. Bouchereau, Statement of the Sugar and Rice Crops Made in Louisiana in 1880-81, "W. W. Carre, Lumber Merchant, and Manufacturer of Plantation Cabins, Stores, etc.," p.; 1882-3, "W. W. Carre, Manufacturer of Cabins, Stores, etc.," p. xii.

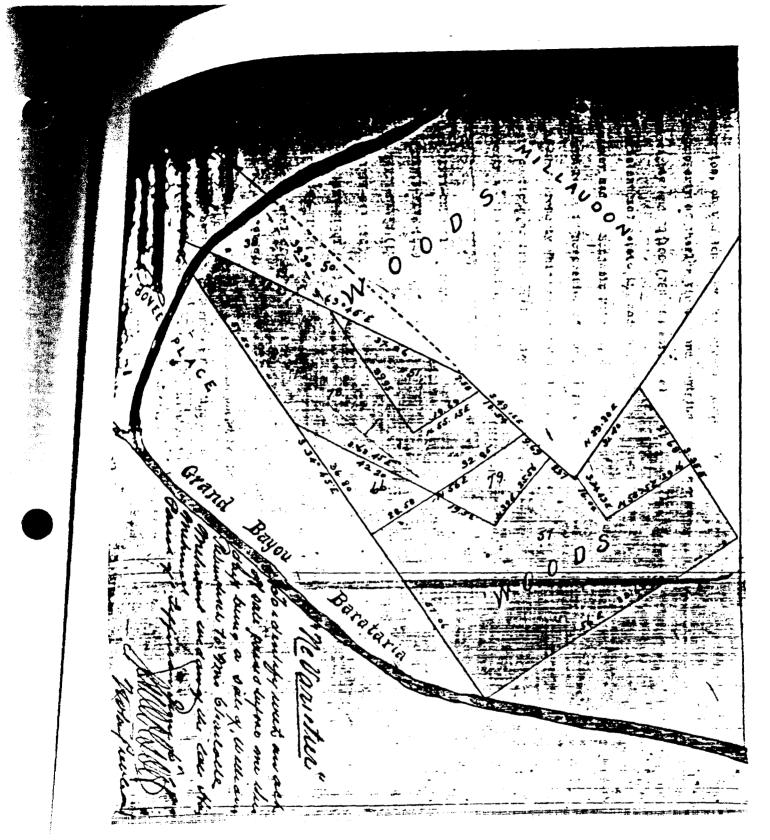
39. Ibid.

40. Louis Ehret, interview with Betsy Swanson, 1986.

41. Works Progress Administration, The Historical Records Survey, Division of Professional and Service Projects, Transcriptions of Parish Records of Louisiana, No. 26, Jefferson Parish (Gretna), Series I, Police Jury Minutes, vol. 3 (New Orleans: June, 1939), p. 430; Frank Ehret, Jr., interview with Betsy Swanson, 1986.

# CHAPTER VII

PLANTATION BACKLANDS



Tracts purchased at the auction of the estate of John McDonogh by Jacob U. Payne (shaded sections) and Laurent Millaudon (Sections 38 and 50), attached to act of sale of the tract comprising the shaded sections by William Rebentisch to Charlotte Rebentisch, June 6, 1902, J. C. Tillotson, notary, JPCH. The tracts are shown in "woods." "Grand Bayou Barataria" is Bayou des Familles; "Bovee Place" is the former Beauvais Plantation or Christmas Plantation.

The triangular part of the study area that lies east of the former Christmas Plantation consists largely of the typress swamp backslope of the natural levee of the old river distributary. The natural levee and the Barataria Road pass through the upper and lower corners of the triangle. Undoubtedly, this area has always been largely forested; many large live oak trees appear to be hundreds of years old.

At the auction sales of the estate of John McDonogh in 1859-60, the several land tracts that this part of the study area partially contains were purchased by owners of large sugar plantations lying immediately upstream on Bayou des Familles. The lands then became the backlands or lower parts of these plantations. Because there was little arable land in these tracts, and because they were remote from the sugar house and headquarters area, the tracts were reserved for logging and livestock grazing. They received little or no cultivation. The tracts remained part of the large plantation properties until the twentieth century, and they continued to be used for logging and grazing until recent years.

The planters who purchased the tracts were Jacob U. Payne and Laurent Millaudon. Of the township sections shown on modern quadrangle maps that are bounded or partially bounded by the study area, Section 3, 37, 51 and 57 were

 $_{\rm coll}$  and Section 38 was purchased by  $_{\rm coll}$  and  $_{\rm coll}$ 

Jacob U. Payne was a native of Kentucky and a member of the New Orleans cotton factor firm of Payne and Harrison.

He also owned a large cotton plantation on the Red River in northern Louisiana. He lived in the New Orleans suburb known today as the Garden District. It was in the Greek Revival Style house that he built at 1134 First Street that Jefferson Davis, President of the Confederacy, died in 1889. 2

In 1857, Payne had purchased the sugar plantation of Jesse Ross on Bayou des Familles, from Ross' widow. It stretched for 45 arpents along the west side of the bayou and adjoined the lands Payne purchased from the McDonogh estate. Included in the sale were 30 mules, 2 horses, 36 draught oxen, about 40 head of cattle, and 72 slaves. All together, the Payne Plantation formed an irregularly shaped but connected land holding that stretched for about four miles. 3

Jacob Payne did not long have the plantation in significant production. The Bell Crevasse of 1859 entirely destroyed his crop for that season. In the following year, his crop produced only 38 hogsheads. In the seasons of 1860-61 and 1861-62 he produced 245 and 304 hogsheads of sugar. The Civil War then intervened.

After the war, in 1866, Payne sold his plantation to William Stackhouse, who sold it to John H. Carter in the

following year. On the same day that Carter purchased the Stackhouse property, on March 7, 1867, he signed another act of sale for the purchase of an adjoining piece of land that lay on the bend of Bayou des Familles above the Christmas Plantation from Marie Julie Gabrielle Lemoine, widow of Pierre Rochefort of New Orleans.<sup>5</sup>

Carter attempted to revive the plantation without the use of slave labor. Between 1869 and 1873, his production ranged between 38 and 190 hogsheads. He also grew corn. Carter was unable to pay his promissory notes to Stackhouse, who petitioned for a writ of sheriff's seizure and sale in 1872. The property was purchased at sheriff's sale in 1873 by the Citizens' Bank of Louisiana. Carter sold the adjoining tract he had bought from the widow Rochefort to John A. Peel in 1875.

The plantation remained unoccupied for 12 years.

During that time it was advertised in Lands and Plantations

Belonging to the Citizens' Bank of Louisiana Offered For

Sale or Rent on Favorable Terms, 1881 and 1882 editions,

with the following description:

A fine Sugar Plantation, situated in the parish of Jefferson, twelve miles from the city of New Orleans, on the west side of the Mississippi River, on Barataria ridge, containing about 3000 arpents of land, 800 under new fence, balance fine cypress timber and wood, one dwelling and outhouse complete, with orange and fig trees surrounding the house; fifteen double frame cabins, one large corn house and stable, one hay house, one overseer's house, one medium-sized sugar house, with walking beam engine in order, one set open kettles, with cooler, tankage, etc., in good order; one new flue boiler, with tools and implements complete. This is a first class stock

farm, being so near the city for marketing, etc. Formerly owned by J. H. Carter.

The plantation property, as put together by Jacob Payne in 1860, totaling 2519 acres, and as described in the above advertisement, was finally purchased in 1885 by Hugo Mehnert for the sum of \$10,000. Mehnert used the former plantation as a cattle ranch and for logging the timber. In 1892, he sold the property to his father-in-law, William Rebentisch, who used the land for the same purposes. The property continued to be used for grazing cattle and occasional logging until acquisition by the National Park Service. 8

Section 38, which Laurent Millaudon purchased, was the remaining part of the east bank tract of the Spanish land grant to Pablo Suarez Ruiz. The west bank Suarez tract. Section 3, had been acquired by Payne. When Millaudon purchased the triangular piece of land, it became part of the largest sugar plantation in Louisiana. The plantation had formerly belonged to Domingo Bouligny, and it had two sugar houses in operation. That portion of the plantation having 28 arpents fronting the Mississippi River, with its sugar house and other buildings, was called the Millaudon Front Plantation or Southside Plantation. The rear portion of the plantation, extending down Bayou des Familles, with its sugar house and other buildings, was called Estelle Plantation. The east bank tract of the former-Suarez property thus became the rear extremity of Estelle Plantation.

Laurent Millaudon was one of the wealthiest men in Louisiana. He was born in France in 1786, and came to Louisiana in 1802. His real estate investments and business ventures helped to develop the City of New Orleans. Among these were the laying out of the upriver suburb of Carrollton, and the construction of the New Orleans and Carrollton Railroad. On his plantation, he employed the latest inventions in sugar machinery, as well as hundreds of slaves. 10

Since there are no signs of cultivation on the tract that was added to the Millaudon Plantation, it is apparent that it never became part of the plantation sugar cane fields. The land was probably used for pasture and logging. Laurent Millaudon sold his plantation to Henry C. Millaudon in 1869, and he sold it to Amos B. Merrill in 1870. Merrill failed at an attempt to operate the plantation largely with imported Chinese labor. and sold the property two years later to Oakes Angier Ames and Frank M. Ames. 11

The Ames brothers successfully operated the plantation for several decades. By the 1890s, the sugar houses were producing from 60,000 to 70,000 pounds of sugar a day, or about 5,000,000 pounds during each sugar-making season. King's Handbook of the United States, published in 1891, states that the Ames were "among the first to introduce the modern methods and appliances for the cultivation and harvesting of the crop, and the equipment is among the best

and most efficient in the State. They have six miles of permanent and portable railroad tracks; and introduced the car for handling sugar cane, which has come into general use of all sugar-raising countries, and has been of great benefit to planters." 12

Laurent Millaudon had a railroad on his plantation, as shown on Zimpel's map of New Orleans in 1834. Millaudon was one of the corporate developers of the New Orleans and Carrollton Railroad. This railroad, which was chartered in 1833 and was operating with steam engines on St. Charles Avenue by 1836, is said to have been the third railroad for general transportation built in the United States. Millaudon's plantation railroad was built prior to the construction of the Carrollton Railroad. Several other planters had, by this early date, laid tracks into their fields and used mules to pull the cars. Whether Millaudon used a steam engine or mules to pull his cars, he was among the first to use a railroad in the history of sugar production. In fact, his railroad was among the first constructed in the world. The Ames family enlarged Millaudon's railroad. 13

Locomotives did not come into general use on sugar plantations until the late nineteenth century. Perhaps the innovation made by the Ames that is implied by King's Handbook was the first use of a locomotive for hauling cane. Oakes Angier Ames and Frank M. Ames had come to Louisiana from Massachusetts. They were descendants of Oakes and Oliver Ames of that State who were largely responsible for

the financing and construction of the nation's first transcontinental railroad, the Union Pacific. 14

In 1895, the Ames Plantation was sold to South Side Plantation Company, incorporated in the State of Maine and administrated by Frank A. Ames as treasurer. In 1899, Frank Ames made a contract with Charles J. Brown, owner of the Christmas Plantation downstream on Bayou des Familles, to extend the railroad from the Estelle Sugar House to the Christmas Plantation and to buy Brown's cane. 15

The Christmas Plantation Railroad is described in detail in Item 7 of the chapter entitled "Roads of the Eighteenth and Nineteenth Centuries." The railroad entered the former Suarez tract that Millaudon had acquired on the east side\_of the Barataria Road. En route to the Christmas Plantation, it cut across the property owned by William Rebentisch in Section 57.

#### ENDNOTES

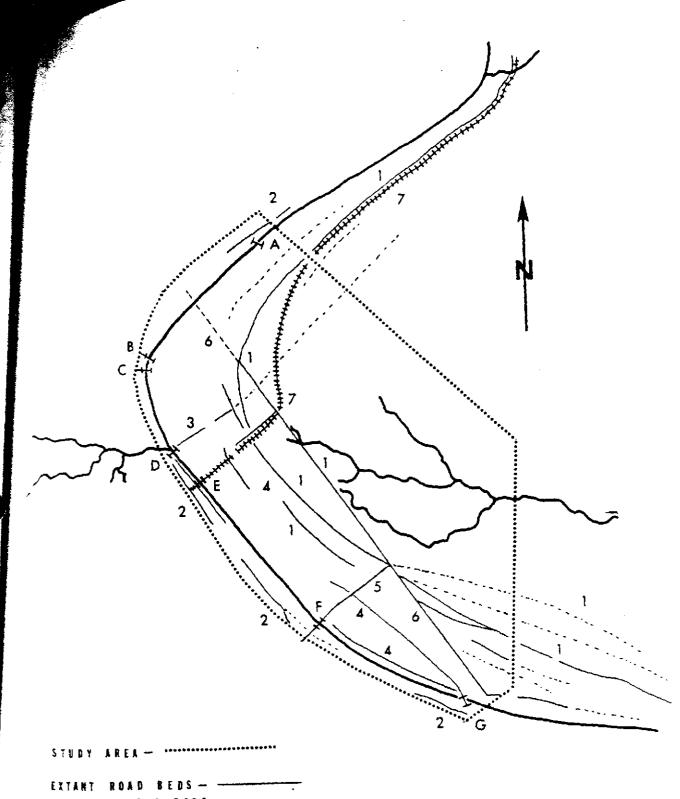
# PLANTATION BACKLANDS

- 1. Sale of the estate of John McDonogh, March 28, 1859, in the Rotunda of the St. Louis Hotel, New Orleans, Edward Barnett, notary, April 5, 1859, NONA; Sale of real estate, City of New Orleans to Jacob U. Payne, February 14, 1860, Charles E. Fortier, notary, NONA.
- 2. Cohen's New Orleans Directory for 1855 (New Orleans: Printed at the offices of The Picayune, 1855), portrait and biography in frontmatter; N. Seawell v. Payne and Harrison, Docket No. 1394, April 25, 1849, LSCC/UNO; Leonard V. Huber, Landmarks of New Orleans (New Orleans: The Louisiana Landmarks Society and The Orleans Parish Landmarks Commission, 1984), p. 73.
- 3. Sale of land by succession of Jesse Ross to Jacob U. Payne, March 6, 1857, Joseph Lisbony, notary, March 6, 1857, NONA.
- 4. P. A. Champomier, Statement of the Sugar Crop Made in Louisiana (New Orleans: Cook & Young, Co., 1859, and Magne & Veisse, 1860-62).
- 5. Sale of property by Jacob U. Payne to William Stack-house, May 25, 1866, William Shannon, notary, NONA; Sale of Property by William Stackhouse to John H. Carter, March 7, 1867, William Shannon, notary, NONA; Sale of land, Widow Pierre Rochefort to John H. Carter, March 7, 1867, E. Gottschalk, notary, NONA.
- Made in Louisiana (New Orleans: Young, Bright & Co., 1869-1873); Sheriff's Seizure and Sale, William Stackhouse v. John H. Carter, 2nd Judicial District Court, Jefferson Parish, No. 3961, February 1, 1872, Jefferson Parish Courthouse, Gretna; Sheriff's deed, John H. Carter to Citizens' Bank of Louisiana, March 7, 1874, Book M F687-688, Jefferson Parish Courthouse; Sale of land, John H. Carter to John A. Peel by public sale, August 4, 1875, G. W. Christy, notary, NONA.
- 7. Lands and Plantations Belonging to the Citizens' Bank of Louisiana Offered For Sale or Rent on Favorable Terms, 1881 and 1882 editions, Vertical File, Louisiana Collection, Tulane University Library.
- Sale of property by Citizens' Bank to Hugo Mehnert, rch 5, 1885, Joseph D. Taylor, notary, NONA; Sale of real estate by Hugo Mehnert to William Rebentisch, May 31, 1892,

- John C. Tillotson, notary, JPCH; Frank Ehret, Jr., interview with Betsy Swanson, 1986.
- 9. Sale of a plantation and appurtenances by Amos B. Merrill to Oakes A. Ames and Frank M. Ames, March 1, 1872, James Fahey, notary, NONA; Cohen's New Orleans Directory for 1853 (New Orleans: printed at the office of the Daily Delta, 1852), portrait and biography in frontmatter.
- 10. Cohen's New Orleans Directory for 1853; Swanson, Historic Jefferson Parish, p. 105; Monsignor Henry C. Bezou, Metairie, A Tongue of Land to Pasture (Gretna: Pelican Publishing Co., 1973), p. 72; Mary Louise Christovich, Roulhac Toledano, Betsy Swanson, Pat Holden, Samuel Wilson, Jr., and Bernard Lemann, New Orleans Architecture Vol II: The American Sector (Gretna: Pelican Publishing Co., 1972), p. 34, p. 67.
- 11. Sale of plantation by Laurent Millaudon to Henry Clement Millaudon, May 29, 1869, James D. Augustin, notary, NONA; Sale of plantation by Henry Clement Millaudon to Amos B. Merrill, January 4, 1870, Selim Magner, notary, NONA; Sale of Plantation by Amos B. Merrill to Oakes A. Ames and Frank M. Ames, March 1, 1872, James Fahey, notary; Swanson, Historic Jefferson Parish, pp. 96-97.
- 12. Swanson, Historic Jefferson Parish, p. 97; Moses King. ed., King's Handbook of the United States (Buffalo, N.Y.: Moses King Corporation, Publishers, 1891), p. 304.
- 13. Charles F. Zimpel, "Topographical Map of New Orleans," 1834, HNOC; Swanson, <u>Historic Jefferson Parish</u>, p. 98; W. E. Butler, <u>Down Among the Sugar Cane</u>, <u>The Story of Louisiana</u> Sugar Plantations and Their Railroads (Baton Rouge: Morgan Publishing Co., 1980), p. 21.
- 14. Butler, <u>Down Among the Sugar Cane</u>, p. 21; Pauline Ames Plimpton, ed., <u>Oakes Ames</u>, <u>Jottings of A Harvard Botanist</u>, 1874-1950 (Cambridge, Mass.: Botanical Museum of Harvard University, 1979), p. 3, p. 43.
- 15. Sale of plantation by Oliver Ames and Oakes A. Ames to South Side Plantation Company, June 5, 1895, COB W f.788, Jefferson Parish Courthouse; Contracts between South Side Plantation Company and Charles J. Brown to buy cane and to build a railroad, July 15, 1899, W. R. Ker, notary, NONA; February 23, 1900, W. R. Ker, notary, NONA; and February 5, 1901, B. T. Walshe, Jr., notary, NONA.

# CHAPTER VIII

ROADS OF THE EIGHTEENTH AND NINETEENTH CENTURIES



EXTANT ROAD BEDS—

POSSIBLE ROAD BEDS—

CHRISTMAS PLANTATION RR BED—

BRIDGE SITES—

2000 FEET

Extant road beds, possible road beds, and bridge sites located by field survey, dating from the 18th and 19th centuries.

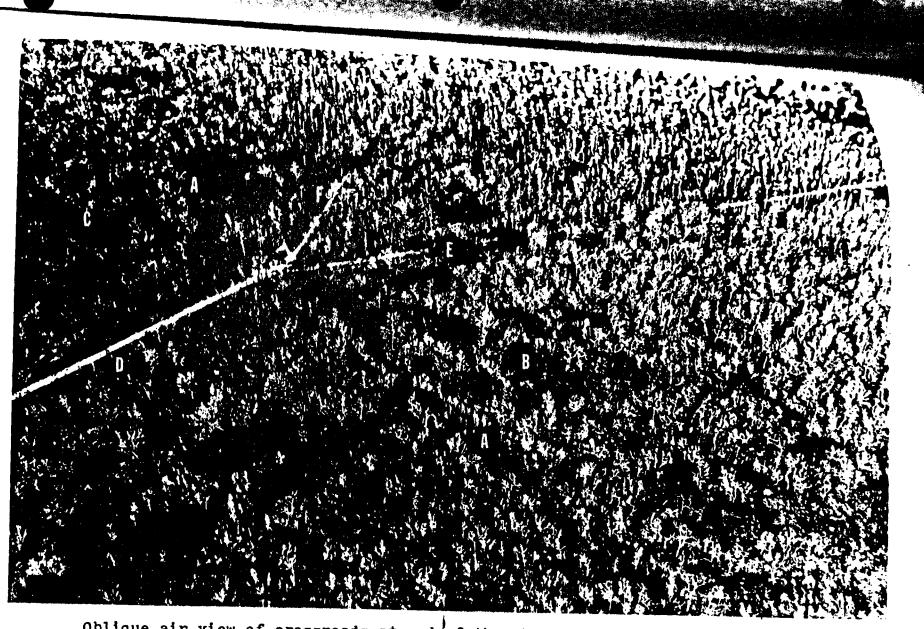


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Oblique air view looking NW from S end of study area, showing several routes and probable routes of the Chemin de Barataria/Camino Real de Barataria (a) following semi-circular natural levee of the old river; Old Barataria Public following semi-circular natural levee of the old river; Old Barataria Public following semi-circular natural levee of the old river; Old Barataria Public following semi-circular natural levee of the old river; Old Barataria Public following semi-circular natural levee of the old river; Old Barataria Public following which in this location began as a servitude on the Christmas Plantation for the Christmas Plantation Headquarters Road, later called in 1865 (b); and the Christmas Plantation Headquarters Road, later called following for the Chemin de Barataria/Camino Real de Barataria (a) following semi-circular natural levee of the old river; Old Barataria Public following semi-circular natural levee of the old river; Old Barataria Public following semi-circular natural levee of the old river; Old Barataria Public following semi-circular natural levee of the old river; Old Barataria Public following semi-circular natural levee of the old river; Old Barataria Public following semi-circular natural levee of the old river; Old Barataria Public following semi-circular natural levee of the old river; Old Barataria Public following semi-circular natural levee of the old river; Old Barataria Public following semi-circular natural levee of the old river; Old Barataria Public following semi-circular natural levee of the old river; Old Barataria Public following semi-circular natural levee of the old river; Old Barataria Public following semi-circular natural levee of the old river; Old Barataria Public following semi-circular natural levee of the old river; Old Barataria Public following semi-circular natural levee of the old river; Old Barataria Public following semi-circular natural levee of the old river; Old Barataria Public following semi-circular natural levee of the old river; Old Barataria



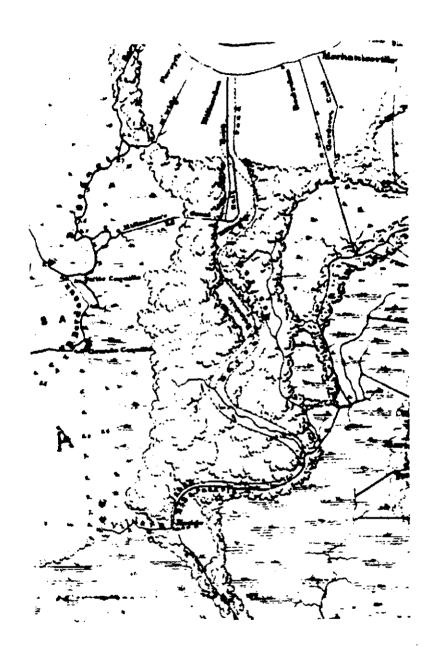
Oblique air view at the intersection of the Old Derrick Road/Christmas Plantation Railroad bed (A) and the Old Barataria Public Road (B). Also showing Texas Company oil and gas pipeline right-of-way of 1935 (C), and 1968 pipeline right-of-way (D). 2/23/86.



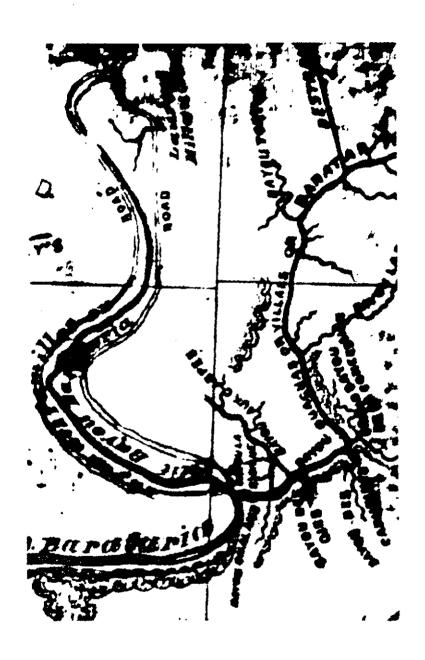
Oblique air view of crossroads at end of the Shell Road, looking N. 2/23/86. A: Old Barataria Public Road at boundary of Christmas Plantation property (originally drawn in 1768, Guerbois-Boudousquie boundary line). B: Several courses of the Chemin de Barataria/Camino Real de Barataria. C: Main ditch of the Christmas Plantation, a possible route of the Chemin de Barataria. D: Shell Road/Old Road/Christmas Plantation Headquarters Road. E: Oil drill site No. 7 access road. F: Oil drill site No. 6 access road. The Ring Levee Trail.



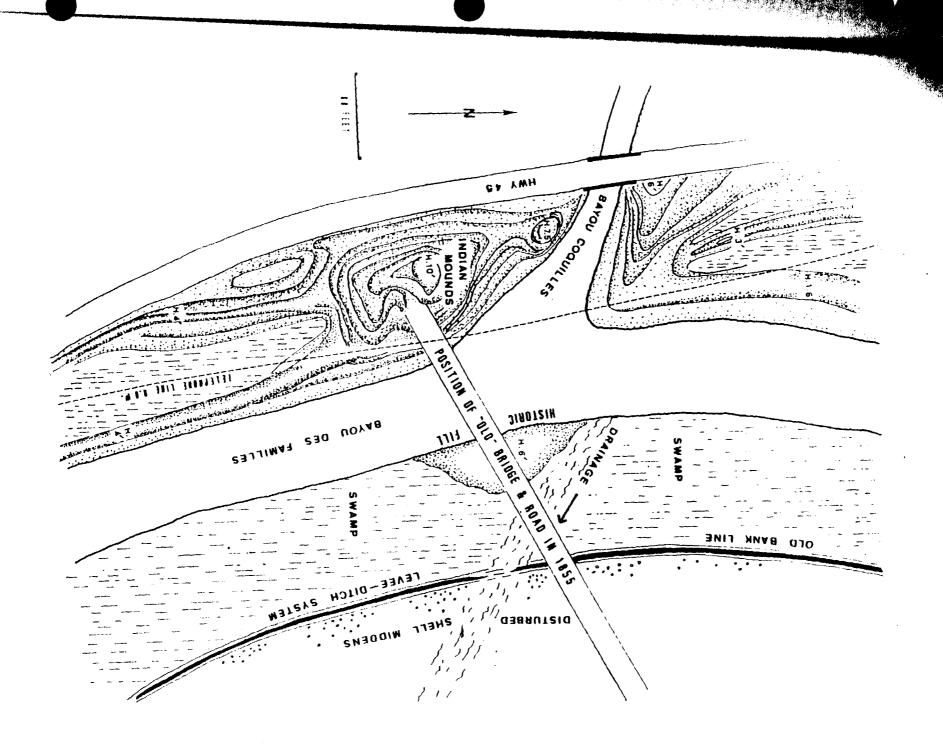
Crawfish "house" with exhumed Rangia shell of a road bed in "walls." 4/86.

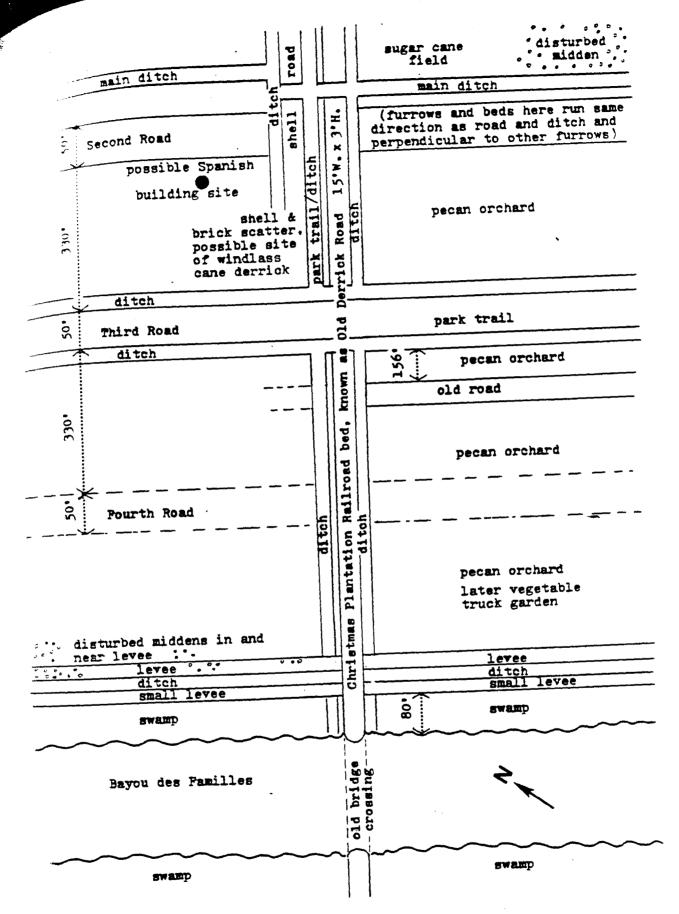


Captain G. W. Hughes, et. al., "Map of a Military Reconnaissance and Survey of the Approaches to New Orleans from the Gulf of Mexico," 1842. Detail of study area and environs.

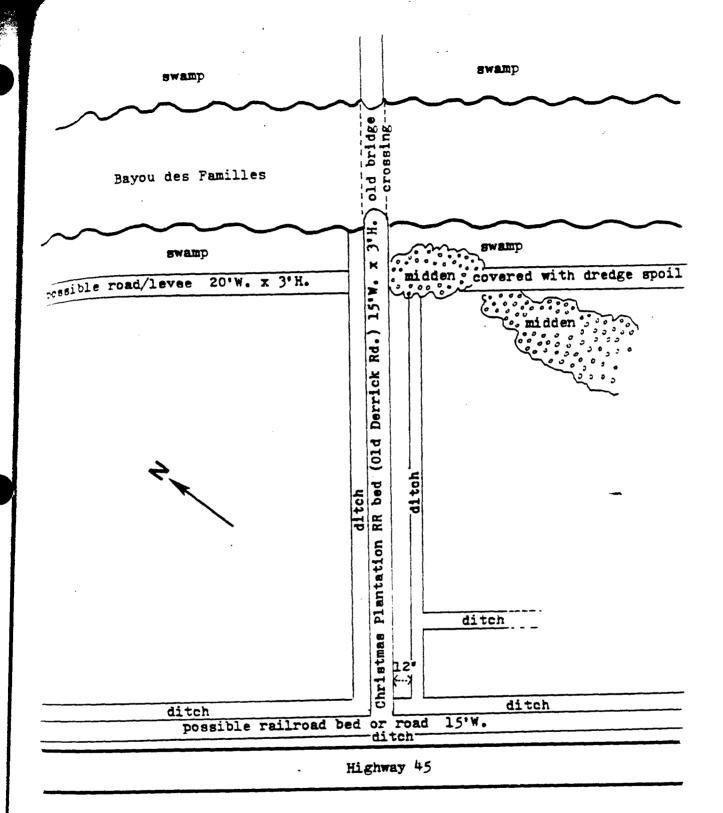


Major D. C. Houston, "Military Approaches to New Orleans," 1863. National Archives, Washington D. C., RG 77, M106. Detail of study area and environs.





Schematic of the area surrounding the intersection of the Old Derrick Road and Third Road showing cultural features. Not to scale.



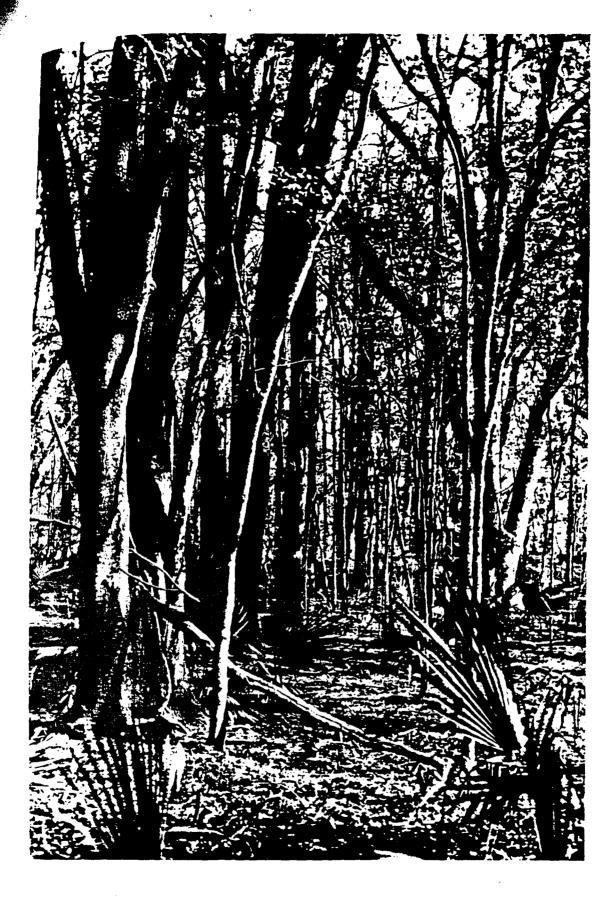
Schematic of the west bank bridge approach of the Christmas Plantation Railroad bed, later called the Old Derrick Road. Not to scale.



Christmas Plantation field road following a route of the Chemin de Barataria (left). Mike Comardelle demonstrates depth of drainage ditch bordering east side of road. Location is 650 feet NW of the Shell Road and 640 feet from the Old Bartaria Road (Big Woods Trail), looking NW. 3/5/86.



Main ditch of the Christmas Plantation and road bordering at right, a possible route of the Chemin de Barataria, looking NW from Ring Levee Trail Parking Lot. 3/86.



Road following east side of main ditch of the Christmas Plantation, looking NW. Trees line spoil bank of ditch. 3/86.



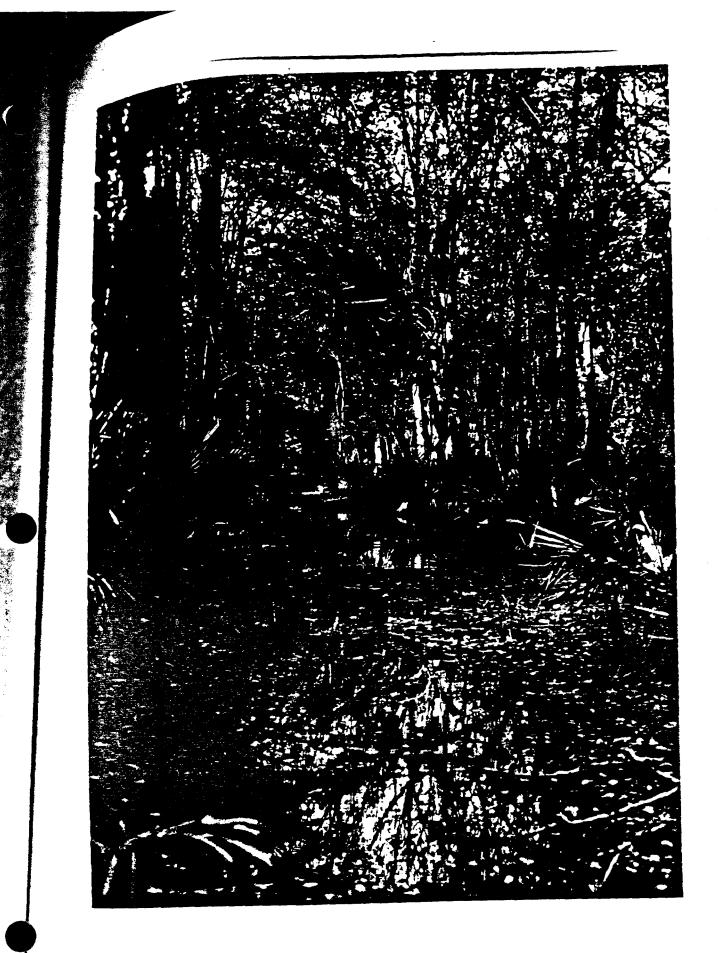
Southern shield fern and a large tree grow on a Christmas Plantation field road in southern part of the study area, looking SE. 3/86.



Tree limbs fallen across the Chemin de Barataria in northern part of the study area, looking NE. 13/86.



Christmas Plantation Headquarters bridge crossing site, looking NE from east bank of Bayou des Familles. 4/86.



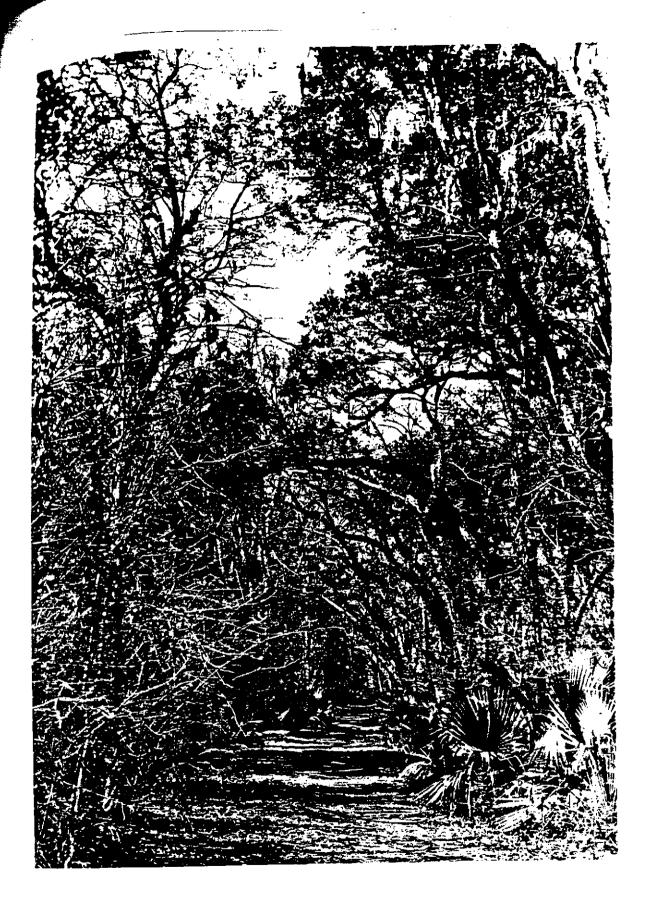
Old Barataria Road, looking NW. 3/86.



The Pole Bridge site on Bayou des Familles. Frank Ehret, Jr. demonstrates the need of a pole to maintain balance, which was required when crossing the bridge in the 1920s. Looking SE. 4/86.



Trail that may have originally been a drainage between the "?!d Derrick Road" and a bordered shell road or railroad bed, looking SW. 2/86.



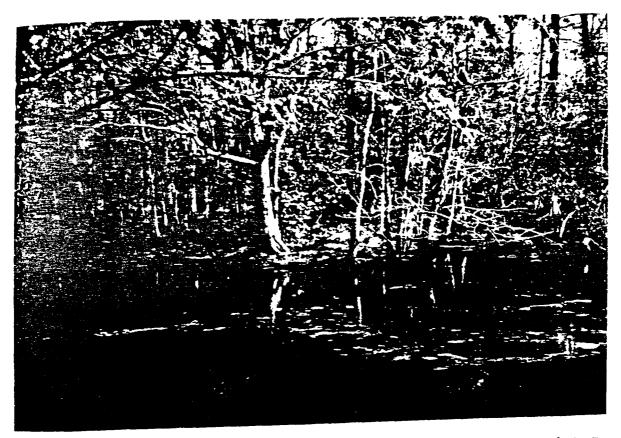
Old Barataria Road, looking NW from Ring Levee Trail Parking Lot. 3/86.



Route of the Christmas Plantation Railroad, looking NNE toward Hurricane Protection Levee. 4/86.



des Familles bridge crossing approach of the "Old Derrick Road," est bank of bayou, looking NE. Louis Ehret, Frank Ehret, Jr., and sirk Historian Michael Strock. 3/20/86.



Bayou des Familles bridge crossing approach of the "Old Derrick Road. looking toward east bank from west bank. 3/20/86.

Archival documentation shows that many roads were located in the study area during the eighteenth and nineteenth centuries. Numerous segments of these old road beds have been located in the forest. Other old road beds that have not yet been located may exist. Because the study area is densely vegetated, it was not possible to investigate every possible road location. Aerial photographs show numerous unusual linear tree lines, some of which may reflect old roads. Some old roads may have been covered by alluvial deposits of floods or by accumulated mould on the forest floor and may only be discovered by archaeological investigations.

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The segments of old road beds located by this study are shown on maps drafted for this report. Additional field surveys may show that more connecting links of the roads exist than have yet been located.

The character of the road beds differs. Some are low and wheel rutted; some are raised a foot or more above the level of the ground. The raised beds probably represent roads that were shut off to further use while still in a good state of maintenance. The drainage ditches that lined some road beds are sometimes visible as shallow linear depressions. In some cases, the present trails may be the remains of bordering ditches that were kept free of plant growth by intermittent standing water and subsequent

treading of humans and animals. Cattle have been pastured in the woods for hundreds of years. They undoubtedly used many roads as cow paths and probably made paths of their own.

Many road beds follow natural ridges created during the abandonment of the old river distributary, and these roads curve with the old meander bend of the river. Old maps suggest that some roads may have existed in areas that have now subsided and become swamp.

The road beds were largely constructed of earth, usually thrown up from the ditches on the sides of the roads. Some roads may have been built of planks, especially those which approached bridges and those in low, wet areas. Other roads were surfaced with clam shells removed from prehistoric Indian mounds in the area. Occasional shells can be seen on some roads today. Heavy traffic crushed and churned the shells deep into the soil. Crawfish frequently exume the shells and put them in the walls of their "houses." Archaeological tests might reveal interesting information regarding road construction.

The original trails in the area were probably Indian trails and buffalo traces, and these were probably used by the early settlers. Roads built later were often 25 to 80 feet wide, as described in the Jefferson Parish Police Jury ordinances, first published in 1825.

#### REGULATIONS,

To fix the manner in which the Levees, Ways, and Bridges, are to be made and repaired, as well as for the construction of Fences, the police of cattle, and other objects of police, within the Parish of Jefferson.

The Judge of the Parish of Jefferson, by and with the advice of the inhabitants composing the Police Jury of said Parish, convened according to law, hath ordained and doth ordain as follows:

Art. 1. The breadth of the highways on both banks of the river, and throughout the whole extent of the Parish, without exception, shall be at least twenty-five feet; they shall have a swell towards the centre, sufficient to facilitate the running off of the waters, and be lined on each side by a draining ditch, two feet wide and one foot deep.

Art. 2. The length of the bridges throughout the whole Parish shall not be less than the breadth of the roads, and their breadth shall be at least three feet. They shall be made of cypress plank of a length equal to the breadth of the road, and two inches in thickness, which planks shall be supported by joists placed at four feet distance from each other, four inches below the level of the road, so that the bridges be two inches below said level. Those bridges which are not constructed according to these proportions, shall be made anew and in conformity thereto.

The bridges on the canals of sawmills and others, shall be solidly constructed of planks twenty feet long and two inches thick; they shall be secured with rails, and the ascent to them shall be easy and commodious.

Art. 3. The ways on the levees shall be, as all others, twenty-five feet in breadth.

Art. 4. If there be any trees, hedges, ditches, or other objects, which in any manner obstruct the passage on the land reserved for public ways, all such obstructions shall be immediately removed, on penalty of a fine of Ten Dollars against the person or persons whose duty it is to make and clear the way so obstructed, and the said fine may be exacted for every time that the said person or persons, being thereto required by the syndic or

syndics of the district, shall have failed to comply.

In this disposition are not comprised such trees as are planted on the side of ways to form alleys, and not obstructing the passage.

#### REGULATION,

Concerning the Barataria Road.

Art. 46. The Barataria road shall pass on the right side of the bayou called Families' Bayou; and the syndic is authorised to cause all the necessary work to be done; in conformity to the following article.

Art. 47. The road shall be cleared for the width of eighty feet through its whole length, and the branches and bodies, and shoots of trees cut away. The inhabitants shall not be bound to make ditches on each side of the road, except in the places that shall have been cleared seven years; but as soon as seven years shall have elapsed since the spot shall have been cleared, the syndic shall order the ditches to be made.

In every part where there shall be not ditches on both sides of the road; as many traverse ditches shall be made as shall be necessary to drain the low grounds, and the said ditches shall be covered by bridges.

The state and federal governments did not begin systematic programs of highway construction until the automobile came into popular use in the early twentieth century. In 1899, Gilbert D. Harris, geologist in charge of the State Geological Survey, published a special report on road making. He recommended that surveys and maps be made of all roads in the State so as to "establish a network of known points and distances." He suggested that road beds be improved, maintained, and fixed in permanent positions, and he recommended the use of shell or gravel, where possible,

as ballast. Harris' description of the location of existing roads probably portrayed the condition of roads in Barataria.

No surveys yet made. — The vast majority of Louisiana roads seems never to have been properly located. They represent enlarged trails. They are, within certain broad limits, wherever each season the traveling public sees fit to go. Observe the broad band of land on either side of most any old or well recognized road and count the different road beds of tens or scores of years ago now recognizable as narrow long ditches and frequently overgrown by forest trees. Look again at the several lines of log roads ("causeways") that can be seen running along parallel to each other across marshy stretches.

Is there any real incentive to do thorough and lasting work on a stretch of road that may soon be paralleled by a new one, simply because the old one somewhere had one impassable spot?

# ROADS AND BRIDGE SITES IN THE STUDY AREA LOCATED BY ARCHIVAL DOCUMENTATION AND FIELD SURVEY

### 1. <u>Chemin de Barataria/Camino Real de Barataria/Barataria</u> Road.

What was apparently the oldest road in Barataria followed the meander of the east bank natural levee of Bayou des Familles, from the Mississippi River to Bayou Barataria. As mentioned earlier in this report, a road following the approximate course of the extant portions of the road was undoubtedly constructed by the earliest settlers Jean-Baptiste Massy, Jean-Baptiste Bourbeau, and Charles Frederig de Merveilleux, who received a French grant to the land in 1726.

The Spanish government reconstructed or realigned the road when it laid out farm plots and built houses for Canary Islander families who were settled on Bayou des Familles in 1779. As detailed earlier in this report, a series of probable Canary Islander house sites have been located in the study area about 200 feet distant from extant portions of the Barataria Road. The earliest map to show the road is a Spanish map of about 1778 showing the property upon which the Isleños were to be established. This map indicates that a road followed both banks of Bayou des Familles between the river and Bayou Barataria. 3

A court case of the early 1840s contains the testimony of the oldest men living who could recall the earliest appearance of the road. They testified that the road that ran along the east side of the bayou was a royal road, and that it had been a good road upon which carriages traveled. Some remembered the road as being, at various times, in poor condition. It had been built before the memory of the witnesses.<sup>4</sup>

According to the testimony of Judge Henry Dugué
Livaudais, the road followed the east, or left, side of
Bayou des Familles from the river to Bayou Barataria and the
traveler could return to the river "in a long circuit" by
ascending Bayou Barataria and the canal on the Foucher
Plantation which was bordered by a road. This canal,
described earlier in this report, had been constructed in
the late 1730s by Claude Joseph Villars Dubreuil. 5

Dugué Livaudais said that the road seemed to have been "forced by the public, in some places trees had been felled and in others they had not been cut down." It bridged Bayou des Familles at the Deléry Plantation and again at the confluence of Bayou Barataria. The area of the confluence was called Coquilles because of the large prehistoric shell mounds located there. After crossing Bayou des Familles at this point, the road ran westward along Bayou Barataria. Dugué Livaudais had known the road since 1829 or 1830. He said the "public crossed at Coquilles with a great deal of difficulty, each traveler being obliged to construct a new bridge, the one then made being constantly destroyed." He said that he once "came near being drowned in endeavoring to cross the bayou." 6

By the 1840s, Laurent Millaudon said the road on the east side of Bayou des Familles was a "mere pathway" used by hunters. However, Louis Bringier, Surveyor General of Louisiana, who surveyed these lands in 1830, said that from the point called Coquilles to Deléry's bridge was "a fine, wide road good for carriages." He saw carts passing on it at that time. 7

Louis Bouligny, who frequented the area from 1803 to 1812 said that the road, which ran through the woods, was good when dry but bad in bad weather. Jean-Baptiste Dubreuil Villars testified that the road was distant from the bayou, low, covered with water, and not kept in repair.

Volant Labarre said that in 1838 he "readily the road in a gig."8

The road is shown on all detailed nineteenth century of the area. Although these maps may not have been raited with precise accuracy, the route of the road appears have shifted slightly through the years. Aerial photographs and features on the ground suggest that the road may have taken several lateral semi-circular courses through the study area at different time periods. The possible positions are shown on maps drafted for this report.

A map of 1835 by surveyor Allou d'Hémécourt shows that a shortcut had been made in the semi-circular course of the road, following the Guerbois-Boudousquié property division of 1768. The road ran just inside the Guerbois property and could have been made at any time after 1768. However, the semi-circular route which followed the higher natural levee also remained in use, perhaps especially in wet weather. According to d'Hémécourt's map, the shortcut left the semi-circular road approximately where the Ring Levee Trail Parking Lot is located and the park's Big Woods Trail begins today.

In the early 1840s, the Jefferson Parish Police Jury constructed a new road on the west wide of Bayou de Familles to replace the old colonial road on the east side. However, the new road was immediately closed by a legal suit. On November 7, 1842, the Police Jury received a letter from Laurent Millaudon, owner of the large plantation that

Pronted the Mississippi River, offering "to change the Barataria Road, and make the same at his lower limit." The old colonial road passed through Millaudon's land, which had formerly been the plantation of Domingo Bouligny. When Bouligny and Francisco Dutillet bought the plantation in 1803 from Pedro Lartigue, the act of sale mentioned that Lartigue maintained on his property a Camino Real which connected with the Port of Barataria. Millaudon's offer was to reconstruct the colonial road or to build another road near it. 10

The Police Jury subsequently passed an ordinance relocating the Barataria Public Road to the old colonial oute on the left bank, from the bridge at Delery's Plantation to Bayou Barataria. Above Deléry's bridge, the Public Road was to follow the right bank of Bayou des Familles. 1865, the Barataria Road was in very bad condition. Police Jury resolved that its construction should be improved. The ditches on both sides of the road were to be three feet wide and two feet deep, instead of two feet wide and one foot deep as had formerly been required by parish ordinance. It was further resolved that the "road be cleared of all incumbrances of twenty five feet in width on each side of said road." The existing parish ordinance stipulated that the road itself be 25 feet wide, but the total width of the clearing for the road was to be 75 feet ide. 11

In 1855, United States Deputy Surveyor Maurice Hauké located the Barataria Road at 660 feet from an extant boundary stone at the upper bayou corner of the left bank tract of the Pablo Suarez Ruiz land grant (Section 38, T15S R23E), measuring along the adjusted Bouligny-Suarez property line upon which the protection levee was later erected. location of the road as it passed through the lower Suárez property line was given by the Surveyor as 1056 feet from the bayou. Another old granite boundary marker is situated on the west side of the road as it crosses the lower property line. Other positions of the road given by Hauke are less describable in terms of present-day features in the udy area, but these positions have been carefully computed and drafted on the map in this study entitled "Terre Haute de Barataria," which reconstructs the topography of the mid-nineteenth century. 12

Parts of the Chemin de Barataria/Camino Real de Barataria/Barataria Road are being used by the NPS as part of the Big Woods Trail. Other parts have not been used in perhaps a hundred years or more but can still be discerned running through the woods.

- 2. Chemin des Coquilles and the roads on the west bank of Bayou des Familles.
- In colonial times, a shell (<u>coquille</u>) road passed along natural levee on the west wide of Bayou des Familles in the study area. The shells of the roadbed had been removed

from the large prehistoric Indian mounds that then existed at the confluence of Bayou des Familles and Bayou Coquilles. The road was called Chemin des Coquilles. It was allowed to grow over and had become nearly impassable by the early nineteenth century. In 1817, a group of Barataria planters signed an agreement to build a road on the west wide of Bayou des Familles from the Mississippi River to Bayou Barataria. The land on the west side of the bayou was said to be a more desirable location for the road than the east bank because it was higher and dryer. Work was begun on this road in the 1820s in the vicinity of the study area, but it was not completed and trees grew over it again. 13

In 1825, the Jefferson Parish Police Jury passed an ordinance that the Barataria Public Road should be relocated from the old colonial route on the left (east) side of Bayou des Familles to the right (west) side of the bayou. The new road on the right bank had not yet been constructed by the late 1830s. On November 5, 1838, the Police Jury resolved once again that the road should be built, and passed an ordinance that it was to be 40 feet wide. Of this width, only 25 feet was to "be more particularly cleared and prepared for the public road from the property of Messrs.

L. C. Deléry & Co." to the end of Boutte's Island (the confluence of Bayou Perot and Bayou Rigolettes). 14

In 1841, the Police Jury contracted with Louis Chauvin elery de Boisclair, principal owner of a sugar plantation located above the study area on the right bank, to build the

Barataria was laid out in 1834 by Jefferson Parish Surveyor Benjamin Buisson. It is shown on a military survey map of 1842 by J. J. Williams, which notes that the road passing through the location of the study area was bordered by "woods on either side." 15

The Jefferson Parish Police Jury demanded that payment for construction of the road be made by the two property owners over whose lands the road passed. The two property owners, John McDonogh and Allou d'Hémécourt, were absentee owners. They objected that they did not use the lands, did not want the road, and should further be indemnified for damages caused by trespassing and cutting trees on their properties. In an ensuing court case in 1842-4, the judge ruled that the Jefferson Parish Police Jury had acted in "perversion of the laws" by attempting to force two individuals to pay for a public utility and in expropriating private lands for a public servitude without indemnification. 16

At that time, much of the study area was part of John McDonogh's Barataria lands. McDonogh had purchased his Barataria property as an investment, and did not use the lands. As a consequence of the legal proceedings, the road built in 1841 on the right bank was closed and the road on the left bank remained in use as the public road. 17

The position of the road on the right bank built by Louis Delery for the Police Jury in 1841 is undoubtedly that

noted by Surveyor Hauke in 1855 as an "old road" bordered by a fence at the end of a field, near the upper bayou corner of the Suarez tract. According to Hauke's field notes, the fence at the edge of the road would have been located at 404.58 feet from the stone marker on the opposite side of the bayou, measuring along the Suarez property line. road noted by the surveyor ran along the levee/ditch system bordering the old field that is visible today. appears to be partially washed-out road bed between the levee and the swamp edging the bayou. The road crossed the lower Suarez property line at 237.6 feet from the bayou. 18

Continuing segments of the parish road built in 1841 may exist and may be discovered by future field surveys. Other old road bed segments have been located on the west bank of the bayou. Some of these are surfaced with shell. South of the Bayou Coquilles, there are two raised linear features located between the bayou and the highway and running parallel to both. They have an elevation of three or four feet and are about fifteen or twenty feet wide. All these road beds and possible road beds could date from any road construction efforts of the eighteenth and nineteenth centuries. Some undoubtedly date from the period of the post-Civil War Christmas Plantation. The route of the plantation road, as it existed at the end of the plantation period, is shown on a 1910 survey map by J. W. T. Stephens. The present highway may have been built upon portions of the

routes of many old roads. Other old road beds may be

beneath the soil and may be discovered by future archaeological investigations. Seven bridge crossing sites, or possible sites, have been located; others may yet be found. 19

## 3. Road to the bridge crossing of Bayou des Familles at Bayou Coquilles.

In 1855, United States Deputy Surveyor Maurice Hauké recorded in his field notes the position of a road leading to an "old" bridge crossing over Bayou des Familles at Bayou Coquilles. Hauké was measuring the western property line of the old Guerbois tract, or Section 11 as shown on modern topographical maps. At a point on this line opposite Bayou Coquilles, the road to the old bridge ran S61W 4.9 chains (328.4 feet). A small levee and ditch at this location may remain from this road bed. A linear tree line marks the route of the road on aerial photographs, and it appears to run back into the swamp. 20

## 4. Field roads of the Christmas Plantation sugarcane fields.

Several extant segments of the Christmas Plantation field roads have been located, as shown on the map of extant road beds in this report. The conjectured continuations of these road segments are shown on the map of cultural features of the Christmas Plantation. The road beds do not survive in all portions of the pecan orchard. They are

built of earth and are about 15 feet wide and about one foot high. Large trees grow upon the roads.

In contrast to the straight, geometric pattern of the field ditches, furrows, and beds, the field roads follow the curve of the old river meander bend. It is unusual for field roads not to conform to a geometric pattern. All old maps that are detailed enough to show field roads on plantations on the Mississippi River show that the roads were laid out in grid patterns. This arrangement was most convenient for tending the fields. Field roads in the study area follow the curving natural ridges formed during the abandonment of the old river distributary. The positions of the field roads suggest that some may be old routes of the Chemin de\_Barataria/Camino Real de Barataria/Barataria Road reused as field roads.

#### 5. The Christmas Plantation Headquarters road.

The headquarters road of the Christmas Plantation exists today as the Shell Road, also called the Christmas Road, or Old Road. It connected the west bank of Bayou des Familles with the Barataria Road, and the plantation structures were located beside it. The earliest map to show the road is the "New Orleans, La." U.S.G.S. Quadrangle Map of 1891, reprinted 1898. It is discussed in detail in the plantation and subdivision chapters of this study. The road is being obliterated by park development. 21

6. The servitude extension of the Barataria Road northwest and southeast along the eastern boundary line of the Christmas Plantation.

The straight segment of the Barataria Road that follows the old Guerbois-Boudousquie property line of 1768 was extended southward and northward from the original cut off points on the semi-circular Barataria Road at the time of the establishment of the Christmas Plantation. When the Widow Pierre Rochefort sold the property to Rufus King Cutler and Pierre Ernest Beauvais in 1865 and 1866, the acts of sale were made with "the express condition that they the said purchasers shall reserve out of the land presently sold an alley or passage of thirty feet in width on the whole length of the portion presently acquired by them, and on the upper line of said property adjoining the property marked on said sketch as belonging to Mr. Stackhouse, said alley or passage to remain for the use and benefit of them the present purchasers and all the present or future owners . ...22

The servitude was necessary for access to a portion of Rochefort's property that lay above the tract purchased by Cutler and Beauvais, above Bayou Coquilles and on the west side of Bayou des Familles. This tract did not become part of the Christmas Plantation until a later date. <sup>23</sup>

A ground search was not made for traces of the road at the north end of the eastern Christmas Plantation boundary, however, aerial photographs clearly show a linear demarkation in tree crown cover along the entire length of the boundary line to the north bend of Bayou des Familles. A bridge crossing could have been located at this place.

The servitude road that follows the southern part of the eastern Christmas boundary line became a route of the Barataria Road and was long in use. It passes through several natural, wet sloughs and was not a good location for a road. Upon reaching the bayou at the southern end of the Christmas property, the road turned eastward and closely followed the bayou. The route is shown on the "New Orleans La." U.S.G.S. quadrangle map of 1891, reprinted 1898. It is possible that the road also bridged the bayou at the southern end of the Christmas property at an earlier date to join the continuation of the servitude to Bayou Barataria which is discussed below in item G.

### 7. The Christmas Plantation Railroad bed.

In 1899, Charles J. Brown, owner of the Christmas Plantation, contracted with Frank A. Ames, Treasurer of the Southside Plantation Company, to build a railroad and sell sugar cane. Under the conditions of the contract, Southside Plantation Company was to buy Brown's cane which he would deliver to the Southside Plantation on a railroad that Brown would build with money loaned by Southside Plantation of the profits of the sale of Brown's cane for three years to repay the loan

build the railroad. Meanwhile, Brown mortgaged the railroad to Southside. 24

The contract specified that the railroad would run for 5.45 miles from a point on the Christmas Plantation to the cane derrick belonging to R. Pritchard Lesassier on Southside Plantation Company's Estelle Plantation. gauge of the track was to conform with the gauge of the railroad existing on Southside Plantation. The ties were to be "laid three feet between centres," four spikes were to be driven into each tie, or two to each rail on each tie, and the ties were to extend two feet beyond the rails. sizes of all ties were to be six by eight inches and five feet long. The bed was to be graded and well tamped. There as to be a main track and switch tracks. Brown had the right to cut ties from timber along the part of the route that passed through Southside Plantation and these were to be made from "heart cypress." The rails were to be purchased from the Illinois Steel Company. 25

A raised linear feature, about three feet high, fifteen feet wide at the base, and about a half-mile long, known as the Old Derrick Road, was probably the bed of the railroad in the Christmas Plantation property. As described in the plantation chapter of this report, a windless cane derrick was located near this raised bed and loaded cane into railway cars. A shell bed adjacent to a part of the raised bed could have been a switch track leading to the cane

derrick. The raised bed bridged Bayou des Familles and could have continued some distance on the west bank of the bayou.

The bed of the railroad northward of the Christmas property was apparently made of shell and was apparently removed. The route of the railroad is a wet trail which forms the eastern loop of the Big Woods Trail. Some shells can still be seen on the trail. A timber survey map of 1901 shows that the railroad crossed the upper boundary line of the Suárez grant, or Section 38, where the protection levee runs today, immediately eastward of the public road which crossed at 690.36 feet from the stone marker by the bayou. The railroad crossed the lower line of Section 38 at a distance—of 405.9 feet east of the crossing of the road and 1372.14 feet east of the bayou. <sup>26</sup>

The railroad was used for several years, and then the rails and cross ties were removed.

### A. Bridge crossing on the Suárez tract (Sections 3 and 38, T23S R15E).

This bridge crossing is described in the chapter entitled "Settlement of the Late Spanish Period," although it is not known if it actually dates from that period. It was noted by United States Deputy Surveyor Hauke in his 1855 survey of the former Suárez tract. It is located 356 feet downstream from the upper corner of the east bank Suárez

tract. A submerged brick foundation measuring about four feet by fifteen feet was located at this position. 27

Yet another bridge crossing and road apparently once existed immediately above the upper Suarez property line. If traces of this road bed still exist, they may be found on the west bank between the ditch that marks the Suarez line and the protection levee. The road was built in 1815 by Dominique (or Domingo) Bouligny to save his sugar crop from the flood waters of a crevasse. Because the Barataria Road on the east bank of Bayou des Familles was covered with water, he built a road on the west bank where the land was higher and dryer. The road ran down to the upper Suarez property line and there it crossed Bayou des Familles to join the old Barataria Road on the east bank. At that time. Louis Bouligny owned the former Suarez property and would not permit his brother Dominique to cut a road through the west bank tract because that tract was unimproved. Apparently, a bridge crossing once existed approximately where the protection levee today crosses the bayou. If, however, the shape of the Suarez property had been changed by the adjusted Suarez-Bouligny line, as shown on the Lafon survey map of 1816, the road would have followed the present-day protection levee, along the upper side of Section 38.28

According to Percy Prestenbeck, Sr., an axe-felled cypress log about sixty feet long and about four feet in

diameter is submerged about 200 feet downstream from the protection levee. It may be part of a collapsed bridge. 29

#### B. The Pole Bridge.

The Pole Bridge was so named because, after it began to fall apart, it was necessary to support one's self with a pole when crossing it to maintain balance. This bridge crossing is described in detail in the section of this report entitled "Cultural Features of the Post-Plantation Period to World War II," however it is very likely that the bridge, which was dilapidated by the early twentieth century, pre-dated this period. Some of the logs from the bridge are lying beside the bayou. 30

#### C. <u>Possible bridge crossing</u>.

This possible bridge crossing is listed as Site No. 7 in "Probable Building Sites of the Spanish Colonial Period Located in the Study Area." Archaeological investigation would be needed to determine the true nature of the site. The 60-foot-wide site appears to be man-made fill and is suggestive of a bridge approach.

## D. <u>Bridge crossing Bayou des Familles opposite Bayou</u> Coquilles.

The "old" bridge crossing noted by United States Deputy

Surveyor Maurice Hauké in 1855 and mentioned in the above

description of road #3, was apparently located immediately

downstream from the mouth of Bayou Coquilles. A large Indian mound south of the confluence of Bayous des Familles and Coquilles (State Survey Site No. 16JE37) and another mound on the opposite side of Bayou des Familles were apparently used as bridge supports. A map drafted for this study shows the positions of the mounds and the probable bridge position. 31

The mound on the east side of Bayou des Familles was thought to be prehistoric. However, it would have been located in the bayou in prehistoric times; the prehistoric shoreline is about 100 feet east of the mound. Archaeological testing by Richard C. Beavers and Associates showed that the mound consisted of "dredge spoil" and metal was found at a depth of 1.1 meters.

UNO 44, 16 JE 47, not a site

UNO 44 is located on the east bank of Bayou des Familles directly across from its confluence with Bayou Coquilles. Its dimensions are approximately 40 m N-S by 20 m E-W. It was recognized by the presence of a grassy "mound" and associated plaza. A l m by l m test pit was excavated on the mound. This excavation revealed that the mound consisted of dredge spoil.

Dredge spoil was undoubtedly deposited on the mound when the bayou was dredged in the 1930s, however, the mound and "associated plaza" could have been an approach to the bridge crossing that was said to have been "old" in 1855. Surveyor Hauké did not clearly state that the bridge of the crossing was still standing.

#### E. "The Old Derrick Road" Bridge.

According to Louis Ehret, the bridge over Bayou des Familles at the "Old Derrick Road," a raised road bed, was gone by 1912. The road is assumed to be the plantation railroad bed. The earthwork approaches of the bridge crossing protrude slightly into the water. 33

#### F. The Christmas Plantation Headquarters Bridge.

As detailed in the section of this report entitled "Structures on the Christmas Plantation," the Stephens map of 1910 shows that the plantation headquarters bridge was located about 100 feet downstream from the present bridge crossing of the Shell Road. This was the probable position of a cypress log float bridge constructed by the plantation owner, Pierre Ernest Beauvais, after he was given permission to build the bridge by the Jefferson Parish Police Jury in 1867. The bridge approaches are slightly raised areas that support dead trees on the swampy shores. 34

#### G. Possible plantation bridge site.

A bridge crossing may have been located several hundred feet upstream from the park boundary at the southern end of the study area, in the place where the NPS has constructed a boom on the bayou. A plantation field road heads toward the bayou at this location, as shown on the map of extant road beds. This could also have been the location of Beauvais' float bridge mentioned above.

It is possible that the field road led to a bridge at this location because the servitude to Bayou Barataria reserved for the Christmas property was a 35-foot-wide road or passage that ran nearby along the upper boundary line of Section 11 for 35 arpents between the bayou and the Christmas Plantation. It was important for owners of interior properties to have access to a navigable waterway in order to ship their produce and obtain supplies. Title to the properties in the study area was held with right-of-way on the Gardere (Dubreuil's) Canal. When the Widow Rochefort subdivided her property, she reserved the "common alley or passage way" for future owners of rear properties. Archaeological investigation might determine if a bridge rossing extsted at or near this location. 35

#### **ENDNOTES**

### ROADS OF THE EIGHTEENTH AND NINETEENTH CENTURIES

- 1. Police Jury of the Parish of Jefferson v. Allou d'Hémécourt and John McDonogh, Docket No. 5209, May 1844, LSCC/UNO, the Regulations of Jefferson Parish, printed in the Barataria Road."
- 2. Gilbert D. Harris and A. C. Veatch, Geological Survey of Louisiana, Report for 1899. Part V. Geology and Agriculture, A Preliminary Report on the Geology of Louisiana (Baton Rouge: State Experiment Station, 1899) pp. 326-30.
- 3. "Plano de las concessiones desde la ciudad de Nueva Orleans hasta Bayu San Juan, la Metairy, Chapitoulas y Barataria," unsigned, undated, found between documents dating from 1775 to 1778, Archivo General de Indias, Seville, Papeles de Cuba, Legajo 2358.
- 4. Jefferson Parish Police Jury v. D'Hémécourt and McDonogh, <del>D</del>ocket No. 5209.
  - 5. Ibid.
  - 6. Ibid.
- 7. Ibid.
- 8. Ibid.

- 9. Allou d'Hémécourt, "Plan presentant les pretentions de Mr. Degruise," April 13, 1835, Plan Book 66, folio 18, NONA.
- 10. Jefferson Parish Police Jury v. D'Hémécourt and McDonogh, Docket No. 5209; Works Progress Administration, The Historical Records Survey, Division of Professional and Service Projects, Transcriptions of Parish Records of Louisiana, No. 26, Jefferson Parish (Gretna), Series I, Police Jury Minutes, vol. I (New Orleans: June, 1939), P. 321, and vol. 3, p. 72; Sale of land by Pedro Lartique to Francisco Dutillet and Domingo Bouligny, P. Pedesclaux, notary, January 18, 1803, NONA.
- 11. <u>Jefferson Parish Police Jury Minutes</u>, vol. 3, p. 333.

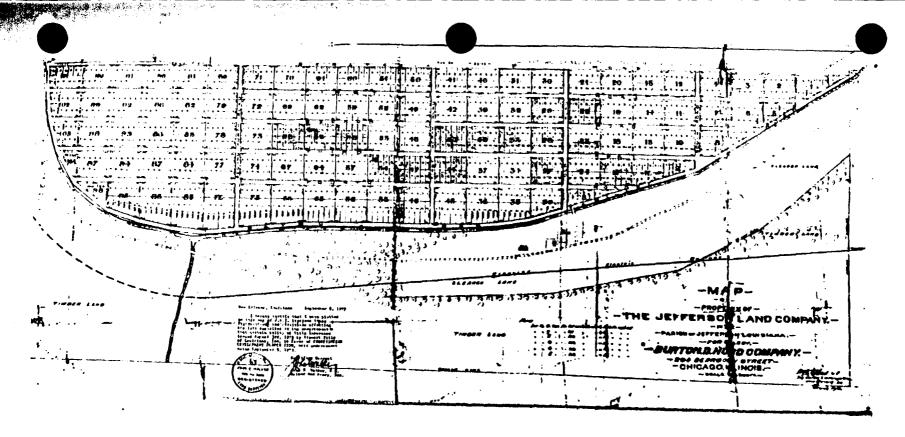
- 12. Maurice Hauke, Deputy Surveyor, Field Notes for survey of the private land claim of Marie Dauberville, Widow Bouligny, Sections 3 and 38, T15S R23E, South Eastern District, Louisiana, 1855, Bureau of Land Management, Eastern States Office, Reston, Virginia.
  - 13. Jefferson Parish Police Jury v. D'Hémécourt and McDonogh, Docket No. 5209.
  - 14. Ibid; <u>Jefferson Parish Police Jury Minutes</u>, vol. 1, p. 169.
- 15. Jefferson Parish Police Jury Minutes, vol. 1, pp. 245-46; Jefferson Parish Police Jury v. D'Hemécourt and McDonogh, Docket No. 5209; J. J. Williams military survey map, 1842, National Archives, Washington D.C.
- 16. Jefferson Parish Police Jury v. D'Hémécourt and McDonogh, Docket No. 5209.
- 17. Ibid.
- 18. Hauke survey.
- 19. J. W. T. Stephens, "Map of Property of the Jefferson Land Company in the Parish of Jefferson, for sale by Burton New Orleans, March, 1910, annexed to act of Alexis Brian, notary, February 10, 1911, NONA.
- 20. Maurice Hauke, Deputy Surveyor, Field Notes for survey of the private land claim of Widow Guerbois, Section 11, T155 R 23E, South Eastern District, Louisiana, 1855, Bureau of Land Management, Eastern States Office, Reston, Virginia.
- 21. "New Orleans, La.," U.S.G.S. Quadrangle Map of 1891, reprinted 1898, LC/TUL.
- 22. Sales of properties, Widow Pierre Rochefort to R. K. Cutler and P. E. Beauvais, December 23, 1865, and July 27, 1866, E. G. Gottschalk, notary, NONA.
- 23. See J. A. d'Hémécourt, "Plan of 31 Valuable Tracts of Land situated in the Parish of Jefferson, District of Barataria," November 3, 1865, annexed to sale of property, Widow Rochefort to Henry Chapron, November 11, 1865, E. G. Gottschalk, notary, NONA.
- 24. Contract to build a railroad and buy cane, between Southside Plantation Company and Charles J. Brown, July 15, 1899, William R. Ker, notary, JPCH.

- 5. Ibid.
- 26. Hunter Stewart, Civil Engineer, "Cypress Timber Survey, South Side Plantation Co., Jefferson Parish, La.," 1901, annexed to timber sale, March 25, 1902, A. W. Cooper, notary, NONA.
- 27. Hauké survey.
- 28. Jefferson Parish Police Jury v. D'Hemecourt and McDonogh, Docket No. 5209, testimony of Louis Bouligny, pp. 55-56.
- 29. Percy Prestenbach, Sr., interview with Betsy Swanson, May 10, 1986.
- 30. Frank Ehret, Jr., interview with Betsy Swanson, 1986.
- 31. Hauké survey.

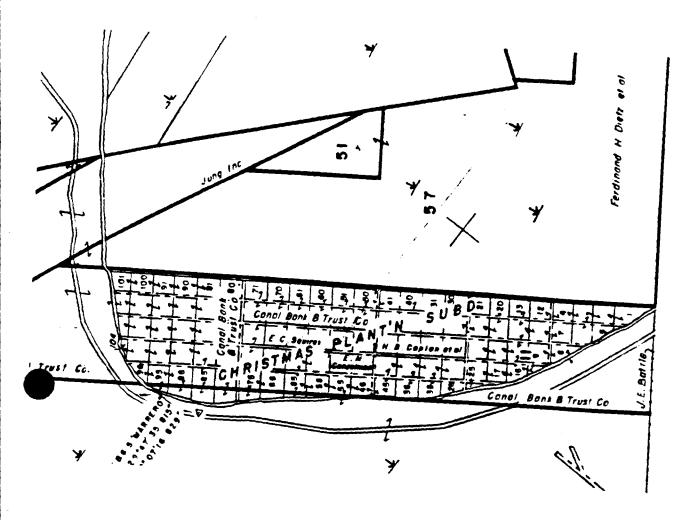
- 32. Richard C. Beavers, "Archeological Site Inventory, Barataria Basin Marsh Unit, Core Area, Jean Lafitte National Historical Park, Jefferson Parish, Louisiana," photocopy, Archeological Research Program, University of New Orleans, 1982, Appendix D.
- 33. Louis Ehret, interview with Betsy Swanson, 1986.
- 34. <u>Jefferson Parish Police Jury Minutes</u>, vol. 3, p. 430.
- 35. Sale of land, Widow Pierre Rochefort to Maximilian Catoire, December 20, 1865, E. Gottschalk, notary, NONA.

CHAPTER IX

THE PAPER SUBDIVISION



M. Stephens, "Map of Property of the Jefferson Land Company in the Parish of Jefferson, Louisiana, for sale by Burton D. Hurd Company, 204 Dearborn Street, Chicago, Illinois," New Orleans, March, 1910, annexed to act of Alexis Brian, notary, February 10, 1911, NONA.



Edgar Tobin, "Aerial Survey Map," 1964, JPCH, copy in Land Acquisition Office, Southwest Regional Office, National Park Service, Santa Fe. Detail of study area showing mid-20th century land owners.

PLEASE NOTE: THIS MAP IS COPYRIGHTED BY EDGAR TOBIN AND MAY NOT BE REPRODUCED

After being cultivated in sugar cane for nearly half a century, that portion of the Christmas Plantation lying on the east bank of Bayou des Familles was laid out in streets and lots for development as a residential subdivision. It remained a "paper subdivision" for nearly three quarters of a century until acquired by the National Park Service. Although most of the streets were cut when the subdivision was laid out in 1910, few lots were sold and residential development never occurred. The subdivision existed only in legal land title, that is, "on paper".

Metropolitan New Orleans evolved and grew from the original Vieux Carre to the present tri-parish megalopolis by the ever-expanding process of subdividing plantations into streets and lots for residential and commercial use. By the early 1800s, plantations in what was to become Jefferson Parish were being subdivided. The first residential development on the west bank of the Mississippi River in present-day Jefferson Parish was McDonoghville, divided into lots by John McDonogh in 1815. By the late 1830s, many plantations on both sides of the river in Jefferson Parish were being surveyed for the drawing up of subdivision plans. Most of these real estate ventures did not actually develop for more than a hundred years. Their streets and lots were a reality only in court house records, and the land remained in cultivation or in woodland, swamp, or marsh. The few lots that were sold were frequently inaccessible because the streets of the subdivisions were often never cut.

Parish was noted for what, in more recent years, became known as "helicopter lots."1

In areas more remote from New Orleans, such as Barataria, large land holdings were increasingly subdivided into smaller farm plots to supply the New Orleans market with vegetables, fruit, and dairy products. The resididential subdivision of a portion of the Christmas Plantation was an unusual real estate venture for the area, and it failed. Urbanization was to be many more years in coming to Barataria.2

The subdivision was laid out by northern business interests. The Jefferson Land Company was incorporated on huary 27, 4908, in Augusta, Maine, with S. L. Shaw as president and J. E. Hartenbower as vice-president. However, the Board of Directors met in Tonica, Illinois, and lots were offered for sale by the Burton D. Hurd Company in Chicago. A New Orleans attorney, Gervais Lombard, was authorized to serve as agent in the execution of the acts of sale which were to be made through the Bank of Jefferson in Gretna. 3

The Christmas Plantation had been acquired by parties of the corporation several years earlier. George H. T. Shaw of Dixon, Illinois, purchased the plantation from Charles J. Brown in 1903. Shaw also bought other large plantations on Bayou des Familles, the Pecan Grove Plantation, the Carter Plantation. By a private act of sale in Illinois, Shaw sold the Christmas Plantation to J. E. Hartenbower

in 1904. Hartenbower transfered the property to a corporation entitled the Old Plantation Company, Limited, for which he served as president. Then, in 1909, the Old Plantation Company sold the Christmas property to the Jefferson Land Company for \$19,500. At the same time, G. H. T. Shaw sold the plantations he had acquired on Bayou des Familles to the Old Plantation Company which sold them to the Jefferson Land Company.

The plan for the residential subdivision was drafted by New Orleans Civil Engineer J. W. T. Stephens in March, 1910, after he had surveyed the property. The subdivision was laid out on the east side of Bayou des Familles, in the bend of the bayou between the bayou and the Old Barataria Road. It was given four principal streets named First, Second, Third, and Fourth Roads, and it was given four cross streets named South Road, Old Road, First North Road, and Second North Road. Bayou des Familles Road was to border the bayou. The streets were 50 feet wide, and most of them were cut.5

The subdivision contained 104 blocks or squares. Those which faced the bayou were irregular in shape. The rest measured 330 by 396 feet. Each of the standard squares contained 12 lots, and each lot measured 66 feet in frontage by 165 feet in depth.6

The subdivision stretched for nearly two miles. Young pecan trees were planted in the lots in a mile-long area in the center of the subdivision to enhance the value of the

lots and induce sales. An electric railway proposed for the west bank of Bayou des Familles would have presumably carried commuters to and from the remote suburb. The railway was never built. 7

In all, only 16 squares and portions of squares were sold during the seven decades that passed between the time when the subdivision was laid out and the recent acquisition of the land by the National Park Service. These squares, numbers 17, 22, 23, 24, 27, 28, 29, 33, 38, 43, 44, 47, 54, 58, 63, and 68, were located in the midst of the pecan orchard. Residential development never occurred.

When the land holdings of the bankrupt Jefferson Land Company were acquired in 1919 by Robert J. Perkins of New Orleans, the only subdivision squares which had been sold were:

Squares 54 and 47 to Mattias Schlingen, April 18, 1911.

Squares 33 and 38 to Mrs. Mary Helm, wife of D. Harvey Helm, January 12, 1912.

Squares 58, 63, and 68 to Octave Suares, December 1, 1910.

Square 29 to George J. Isenmann, April 18, 1911.

Square 27 to William A. Benton, March 26, 1914.

Square 44 to William Laferriere, April 18, 1911.

Square 43 to Mrs. Mary Helm, widow of D. Harvey Helm, March 1, 1913.

Square 17 to A. Vere Martin, April 15, 1913.9

In addition to these subdivision squares, the Jefferson Land Company sold five acres of land on the west bank of Bayou des Familles, south of the present Shell Road, to

William Gomez on February 12, 1912. Gomez and his wife, Mary Eskine Gomez, lived on the tract of land in a house that had probably belonged to the Christmas Plantation until 1920 when he sold the property to Robert Logan Perkins. 10

Robert Logan Perkins was probably a son of Robert J.

Perkins and his wife, Mary Virginia Logan Perkins. The elder Perkins came to New Orleans from Lafourche Parish and graduated from the Tulane University Law School in 1893. He then began his law practice in Jefferson parish and served for nine years as district attorney for the parish. He later relocated his law practice to New Orleans. 11

The lands that Robert J. Perkins acquired from the bankruptcy of the Jefferson Land Company stretched for six miles along Bayou des Familles. He apparently made no effort to develop the property but granted leases to the Delaware Louisiana Fur Trapping Company, Incorporated, and the Kelly Land Company of Texas for oil and gas exploration. He probably also sold timber from the lands and grazed cattle. Perkins mortgaged the property to the Canal Bank and Trust Company of New Orleans. This company acquired the property following Perkins' bankruptcy in 1934.12

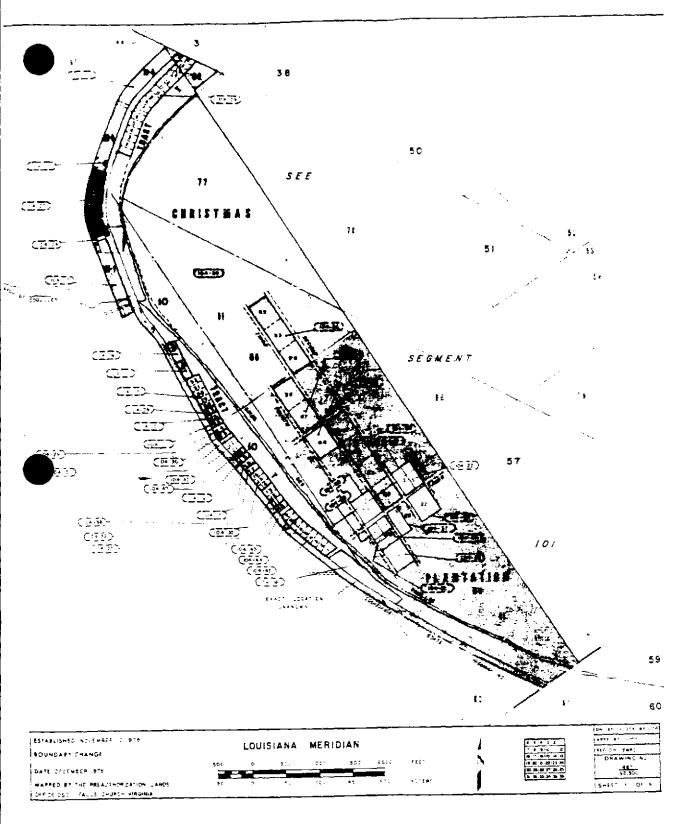
The Canal Bank and Trust Company continued to exploit the resources of the land, but apparently did not attempt to develop the residential subdivision nor to subdivide and sell other parts of the large property composed of the former plantations. The company let logging contracts and

leases for livestock grazing, and occasional leases for some truck farming.  $^{13}$ 

Robert Logan Perkins retained the five-acre Gomez tract and subdivision Square 44 until 1939 when these properties were sold for unpaid taxes by the Jefferson Parish Sheriff. Louis L. Dauenhauer, Sr. purchased the properties at the sale for \$41.30. The Dauenhauer family did not use the properties but retained them until they were acquired by the NPS in the early 1980s.14

Beginning in the late 1950s, the owners of many of the subdivision squares that had been sold leased mineral rights to oil and gas exploration companies. Although some seismic exploration may have taken place in the late 1950s, aerial photographs show no changes in tree cover until the 1960s and 1970s when several lots were partially cleared for apparent oil exploration work. Oil exploration in the study area will be treated in the following chapter.

In the late 1960s and early 1970s, State and Congressional legislative actions began to be made toward the establishment of a park in Barataria. At the same time, real estate speculators accelerated the exchange of "paper" land sales, frequently escalating the market price of the properties beyond their true value. The many property exchanges had little actual effect on the land, therefore this study will not detail these numerous title transactions. 15



National Park Service Land Acquisition map, 1979-83, showing subdivision tracts in separate ownerships.

During the 1970s, the remaining unsold portions of the Christmas tract passed from Southdown, Incorported to Zapata Norness, Incorported to Zapata Development Corporation to Leo G. Rose to Christmas Lands to American General Investment Corporation to Cross Timbers Development Corporation. The National Park Service purchased the property from the last named corporation in 1980 for \$4,225,000.00.16

In 1974, 48 small lots facing the east side of Highway 45 were surveyed and drafted for Christmas Lands by Civil Engineer John E. Walker. Several larger tracts were also drafted between the highway and the bayou. A number of these lots and tracts were sold, as were some of the yet-unsold lots in the original subdivision. New streets were dedicated by the Jefferson Parish Council to run between the new lots. The streets were not cut, and the "paper" sales had little or no effect on the land itself.17

An interesting description of the paper subdivision was given in an appraisal report in 1980, on the eve of the subdivision's incorporation into the new National Park.

The subdivision contains 1191 lots plus streets for a gross area of 382.25 acres. This includes 1083 regular shaped lots 66' x 165' and 108 irregular shaped lots. Some of the lots had been sold off in years past and as of March 17, 1978 there were 927 regular shaped lots and 108 irregular lots plus the respective street areas that had not been individually sold. This comes to 337.25 acres. Recently there were 9 lots sold in two separate transactions. Therefore, it appears that Cross Timbers Development Corporation owns 918 regular shaped lots and 108 irregular shaped lots. The 9 lots represent about 2.25 acres plus 1/2 of the adjoining streets (25 x 594) which is 14,850 square feet or approximately

2.6 acres. The estimated Cross Timbers ownership of streets and lots comes to about 334.65 acres.

Cross Timbers Development Corporation has registered the subdivision with the Department of Housing and Urban Development. The subdivision was of record prior to the time Jefferson parish began to require the developer to physically install or financially guarantee streets and utilities. Jefferson was famous for its "paper" subdivisions and many a developer sold lots that had no frontage on a physical street. Later the owners shared in the cost of the bond lien programs where the parish installed streets and utilities. Because this subdivision does qualify as a "paper" subdivision, lots could be sold with no obligation on the developer to install streets and utilities.

It would be unfortunate if this were to happen. This tract is one of the prettiest unimproved tracts south of Lake Pontchartrain. Pecan orchards on the site appear on a Gandolfo survey to cover an area equivalent to about 11 squares which is approximately 35 acres. The pecan trees look to be older than the Stephens survey or a least 75 years old.

The remainder of the site needs to be cleared. Throughout this wooded remainder are breautiful oak trees that must be hundreds of years old. If the surrounding trees were not there, these oaks would have probably spread out like those in Audubon Park. This can partially be seen in the photographs included herein.

In the wooded area there are palmettos growing throughout. As a matter of fact they can be seen in one of the photos to be growing profusely in a beautiful grove of oak trees. The wooded areas are not cross ditched and the water can stand in there. In the pecan grove the land has been cross ditched and except for the ditches themselves it is basically dry.

There is another drawback to sale of this land as a paper subdivision. The layout is not good at all. There is a street on the entire perimeter. This means that cost of these streets must be amortized by the lots on only one side of the street, and there is too much street area because of this. On the Bayou des Familles side this is even worse. Instead of having high priced lots backing up to the bayou as on Park Island or Oak Park in New Orleans, these lots face the street on the bayou.

Additionally, the streets are in a straight grid pattern except for the perimeter. Winding streets offer a more attractive appearance and higher priced lots. The problem of the previous sales is a serious one, but if cooperation could not be obtained from these owners, a better layout could still be arranged incorporating their squares in the layout.

The subdivision is on the east side of Bayou des Families. Cross Timbers Development Corporation owns other areas between the bayou and Barataria Road. Previous owners sold sections of the land fronting on Barataria. Some of these sales are of sites that extend all the way to the Bayou. Other sales are of sites that leave land between the bayou and the front site. For instance, ... the land between the bayou and Tract Y which had been sold earlier is 14.4321 acres. Behind parcels A, B and X there appears to be another 8.286 acres. This brings this total to 22.7181 acres between the bayou and Barataria frontage tracts that have been previously sold.

This is certainly unusual. It is doubtful that there is any market for this land except to the purchasers of the frontage. It would not be economically feasible to run streets there because there is not enough depth and at best you would only get one sided use of the streets...

To develop the subdivision, a new bridge over the bayou would have to be constructed. Using this as as an exclusive entrance, the security angle could be emphasized in advertising. Undoubtedly, a smart developer would locate the bridge where he owned the Barataria Road frontage. At that point you would have a couple of commercial sites. . . .

The remainder of the Barataria Road frontage could be used for residential lots with road frontage and the bayou to the rear. This type of residential is in great demand. To see what can be done with sites like these one need only drive into Crown Point to see some of the lovely homes on Barataria Road. 18

That part of the study area that lies eastward of the Christmas Plantation property remained entirely forested and undeveloped until oil exploration began there in the 1960s. The oil operations will be discussed in the following chapter. Before the 1960s, logging and cattle grazing were

the principal activities in this area, as they had been in the preceding century. A few Negroes lived in cabins in these woods and hunted, fished, trapped, gathered Spanish moss, and cut railroad cross-ties and fence posts.19

Sections 51, 55, and 57 of T15S-R23E were part of the Carter Plantation in the post-Civil War period. The study area includes a portion of this 780 acre tract. As recounted earlier, the Carter Plantation was acquired by Hugo Mehnert in 1885, and he sold the property to William Rebentisch in 1892. They used the plantation as a cattle ranch. Rebentisch's daughter, Charlotte, was Mehnert's e. She acquired the property from her father in 1902 and continued to use the property to raise cattle. At least one Negro cowboy lived on the property and herded the cattle. 20

Ferdinand Hugo Dietze and Charlotte Amy Dietze, grand-children of Mrs. Charlotte Rebentisch Mehnert, inherited the property in 1927. The granddaughter was the wife of Burton M. Ashley, and she later remarried Louis DeLimon. They retained the property and continued to put it to the same uses, with the addition of oil exploration, until 1970 when they sold the tract to Harold W. Adams. 21

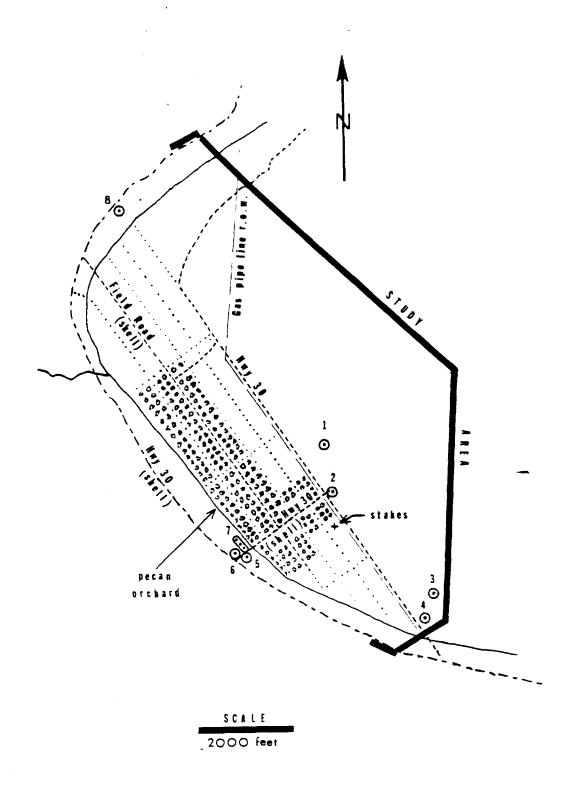
On the same day that Harold Adams purchased the property from Ferdinand and Charlotte Dietze, March 24, 1970,
cold it to Dr. Bernard A. Goldman and ten others for
431,200.00. In 1982, Goldman and Associates sold the
part of the property which lies within the study area.

comprising 464 acres, to the national Park Service for \$2,096,000.00.22

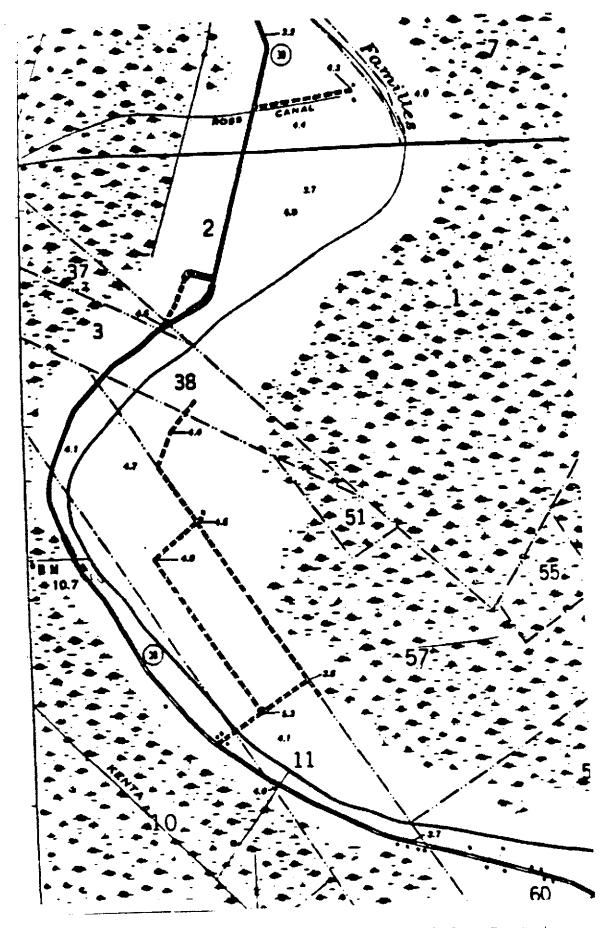
Section 38 of T15S-R23E, comprising 86 acres, was originally part of the Pablo Suarez Ruiz Spanish land grant. As previously detailed, the tract became the rear part of the large Millaudon Plantation which fronted on the river, in 1859. The rear part of the Millaudon Plantation was called Estelle Plantation, and the rear part of Estelle Plantation was called Lower Estelle. Section 38 was at the extreme lower limit of Lower Estelle. The area remained uncultivated and wooded through the plantation period. It was used for logging and cattle grazing.

During the late nineteenth and early twentieth centuries, Estelle Plantation was owned by the Ames family's South Side Plantation Company. In 1918, this company sold its holdings to Ames Farm Land Company, Incorporated for the purpose of selling farm plots. In 1918, 1920, and 1930, Civil Engineer J. W. Stephens drafted maps dividing the plantation into small tracts. In 1935, the Crescent Bed Company of New Orleans purchased nine of the tracts, totaling 372 acres, including Section 38.23

The president of Crescent Bed Company was Peter Jung, Sr. It is interesting to note that, like the neighboring and owners Mehnert, Rebentisch, and Dietze, Jung was of German descent. He was born in New Orleans in 1858, and he went into the furniture business. In 1900, he started an



Cultural features of the Post-Plantation Period to World War II. Dotted lines represent streets laid out for the Jefferson Land Company residential subdivision in 1910 which soon fell into disuse or were never completely cut. Dashed lines represent vehicle roads that remained in use during this period.



United States Geological Survey, "Bertrandville, La." topographic quadrangle map, 1940. Enlarged detail of study area. Scale: 1 inch = 2000 feet.

bed company. He was also the proprietor of the Jung 24

Although many of the Ames farms were purchased for truck farms and dairies, Peter Jung did not develop Section 38. In 1949, the Crescent Bed Company conveyed the property to Jung, Incorporated. In 1959, Arthur L. Jung, Jr. received the property from the estate of Peter Jung. The National Park Service acquired the property from Arthur Jung. 25

Although most of the land transactions in the study area postdating the plantation period were "paper sales," and little use was made of the land, the study area contains a number of cultural features and sites of the period.

CULTURAL FEATURES DATING FROM THE POST-PLANTATION PERIOD TO WORLD WAR II

#### The pecan orchard.

The most apparent cultural feature of the postplantation period in the study area is the pecan orchard.

It stretches for a mile on the old river bed on the east side of Bayou des Familles. A detailed description of the orchard is given earlier in this study as "Hardwood Succession area #5."

The pecan trees were planted as a means of promoting the sale of lots when the Jefferson Land Company Subdivision was laid out in 1910. In the early twentieth century, the development of residential subdivisions as pecan or fruit

was a popular real estate marketing device in the light of New Orleans. An example downriver from New leans, the Versailles Pecan Groves, was advertised in 1916 "Make You Independent, Only a Few Minutes from Canal reet" and was touted to be an investment "for your children and your children's children for many generations to come."26

Jefferson parish in the early twentieth century. In 1912, one acre of a ten-year-old pecan orchard on the West Bank was offered for sale for \$3,000. In addition to sale of the nuts, revenue was derived from the cultivation of corn, vegetables, or hay grown beneath the pecan trees, and livestock were grazed in the orchards. The Jefferson Land Company orchard was maintained in these ways, and the streets of the subdivision were used to service the orchard. However, aerial photographs of 1945 show that, by that time, most of the pecan orchard had been abandoned and was undergoing reforestation. 27

# The streets of the Jefferson Land Company Subdivision.

The subdivision streets were laid out in 1910 according to a plan drafted by Civil Engineer J. W. T. Stephens of New Orleans. The principal streets run in a northwest-southeast direction, and they parallel the Dauterive property division lines of 1768. That part of the Old Barataria Road that follows one of these lines was incorporated into the

ward the Bayou, the streets are named First, Second, Third and Fourth Roads. Four perpendicular cross streets are named, from north to south, Second North Road, First North Road, Old Road, and South Road. According to the plan, Bayou des Familles Road was to border the east bank of the bayou which was to be a "navigation canal." An electric railway was proposed to run on the backslope of the westbank natural levee but was never built. 28

The road fronting the east bank of the bayou was never constructed, but most, if not all, of the other streets were apparently cut in 1910. They are often visible on the ground and as tree lines on aerial photographs. The extant street beds are the 50-foot width shown on the subdivision plan, and they are sometimes bordered by shallow ditches.

Old Road, also called the Shell Road and the Christmas Road, was the old plantation headquarters road which was incorporated into the subdivision. This road was apparently never widened to the 50-foot-width of the subdivision streets. It is only about 13 feet wide and is bordered by deep ditches. Soon after the laying out of the subdivision, the road was extended directly across Bayou des Familles to join with the road on the west bank of the bayou. The present wooden bridge probably dates from the 1960s, but many old bridge pilings are located under the bridge. Some of these pilings could date from the original bridge that was constructed at this site when Old Road was extended soon

curved slightly as it neared the bayou and crossed to the sub-invision of the sub-invision of the sub-invision of the sub-invision of the sub-invision and Associates revealed the crushed shell mixed with occasional small particles of brick that composed the bed of the plantation road on the south side of the subdivision extension of old Road near the bayou. 29

Road and the Old Field Road, also called the Pecan Orchard Road and the Old Field Road, remained in use after the roads were allowed to revert to forest. The north end of Third Road bridged Bayou des Familles and connected with the public road on the west bank of the bayou, as shown on a map of 1918. A search was not made for the bridge crossing site; somes remains of the bridge may exist. The map also shows that Third Road was shelled and that at least the portion Old Road from the shelled road on the west bank of the bayou to Third Road was surfaced with shell. The map labels Third Road "Shell Road" and notes that the road is bordered with "Pecan Orchards." 30

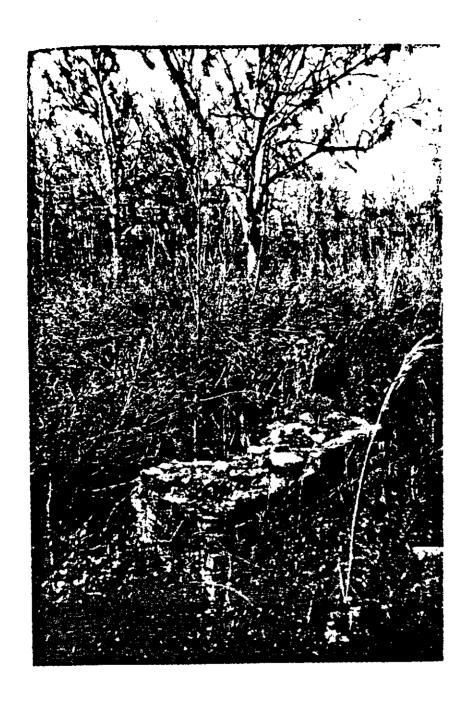
Shell was undoubtedly laid on the roads by the Jefferson Land Company to facilitate both the harvesting of pecans and the selling of lots. Occasional shells can be seen on Third Road. Old Road was apparently shelled when it was a plantation road and it continued to be resurfaced with shell because it remained in use to present-day. According



Third Road, looking SE. 2/86.



Third Road in the pecan orchard, looking NW from the Shell Road. 4/86



Brick chimney of the Gomez House, looking NE. 2/86.

the road still looks the same as it did in 1912. 31

### trate Highway 30.

Louisiana State Highway Commission maps of the 1920s and 1930s show that the old Chemin de Barataria or Camino heal de Barataria, more recently known as the Old Barataria public Road, was part of State Highway 30. According to Frank Ehret, Jr., who moved to Barataria with his family in 1918 when he was one year old, the road "was a wagon trail sparsely covered with clam shells in spots." The wheels of the Ehret Model-T Ford "would bog down in soft spots on the road" and "many times you had to travel off the road a distance to avoid the deep ruts." He recalls traveling the road as a child with his family by automobile in the 1920s, and he many times traveled the road on horseback in the early 1930s.

In dry weather the road was passable but in rainy weather your chances of stalling were probable. In many places the car would circumvent the bad sections and then come back to the old road, making detour road beds all along the ridge.

As I can remember there were several roads and bridges over Bayou des Familles that would connect the old public road to the new shelled road on the west side of the bayou. One crossing was at Ross Plantation. The next one going south was just beyond the present parking lot in the Jean Lafitte Park by the Twin Canals. Further south, before the turn approaching Coquilles, was another one. It was called the "pole bridge." It was a floating bridge of long cypress logs across the bayou four abreast and linked together by cross timbers. The logs are still there except they are scattered along each shore. The next bridge was at the house where Willie Gomez lived at the entrance of Brown's field.

The bridge crossing below Twin Canals remembered by Mr.

Wheret was probably that previously mentioned which connected

wird Road to the west bank road. A search was not made for

the site of this bridge. The "pole bridge" was located

below Fourth Road. When the bayou was dredged in 1938, some

of the large logs that formed the bridge were thrown on the

swampy shores on both sides of the bayou. According to Mr.

Ehret, the appellation of "pole bridge" was given because

the bridge had become partially dismembered by the 1920s,

and it was necessary to support one's self with a pole while

walking across it in order to maintain one's balance. 33

The approach to the bridge on the west bank is a 200-foot-wide area that includes what appears to be man-made fill in a slough. It is located about 1950 feet northward on Highway 45 from Bayou Coquilles. The bridge crossing may have pre-dated the twentieth century. It may not have been related to the subdivision Fourth Road which may never have been entirely cut. An attempt was not made to locate the east bank approach and road leading to the bridge.

The bridge at the Gomez house, mentioned by Mr. Ehret, was that of the subdivision Old Road which connected the Old Barataria Road-Highway 30 with the west bank road. Old highway maps indicate that Old Road was used as part of the highway system.

The Old Barataria Road - Highway 30, following the 1768 Gerbois-Boudousquie property line, crossed Bayou des Familles at the southern end of the study area. An earth approach.

Old highway maps also label the road on the west bank as Bayou des Familles as Highway 30. During the 1920s or 1930s, maintenance of the east bank highway was abandoned by the State in favor of the west bank road. Thereafter, the east bank road was used largely by hunters, trappers, loggers, and moss-pickers. It then became known as the "Old Barataria Road" while the west bank road appropriated the name of the "Barataria Road." 34

The west bank road was surfaced with shells removed from the prehistoric Indian burial mounds on Bayou Coquilles. According to Mr. Ehret, "it was a common sight to see bones and parts of skulls on the side of the road bed." The road bridged Bayou Coquilles, probably in the same location that it crosses the bayou today. Mr. Ehret recalls that

Many people feared crossing this site at night, especially the Negroes. There were all sorts of tales and stories about ghosts and weird sounds. Some said Jean Lafitte's ghost still haunted the area of the oaks that he frequented during his life, while others said it was the ghosts of the Indians whose graves were desecrated by those hauling off the clam shells from the middens. Horses were said to have shyed and thrown their riders.

One of the fears here was real. During the days of prohibition, bootleggers came through Bayou Coquilles with luggers loaded with five gallon cans of liquor. At Coquilles they would unload onto trucks that would go to New Orleans. Hi-jackers who were tipped off about the boats coming in would be in wait and try to take the liquor. 35 Many were killed in shoot-outs that ensued.

Although the west bank road was designated by the State part of Highway 30 in the 1920s, the road did not legally become part of the State highway system until 1930 when the state purchased the right-of-way from the land owner, Robert J. Perkins. Prior to that time, it was a private road which had served the plantations on the west bank of the bayou. The sale by Perkins was made for six miles of 100 foot-wide right-of-way for \$3,000. The existing road was 30 feet wide and had numerous curves, therefore the State purchased the right-of-way with the privilege of relocating the road to the most desirable locations. 36

The old plantation road on the west bank of the bayou approximated the route of the present highway and was undoubtedly used as a public road after the demise of the plantations. The road is shown on Stephen's subdivision map of 1910, and portions of the old road bed appear to exist adjacent to the present highway. Other stretches of the old road seem to be under the present highway.

The State improved the plantation road for public use in the 1920s and may have then relocated some portions of the road bed. Because the State did not own the right-of-way, Robert Perkins brought suit against the Louisiana Highway Commission, enjoining the Commission from further maintenance of the road. After the State purchased the right-of-way in 1930, the Highway Commission eliminated some of the curves. The shell road was asphalted during the

1930s. The State redesignated the road as Highway 45 in the 1950s. 37

Public service right-of-ways and easements were granted parallel and adjacent to the highway resulting in the clearing of a wide band through the forest. In 1926, Robert Perkins granted a general permit to South Central Bell Telephone and Telegraph Company. Additional right-of-way permits were granted to the telephone company by the subsequent land owner, the Canal Bank and Trust Company, in 1938 and 1941. The telephone right-of-way is 50 feet wide. 38

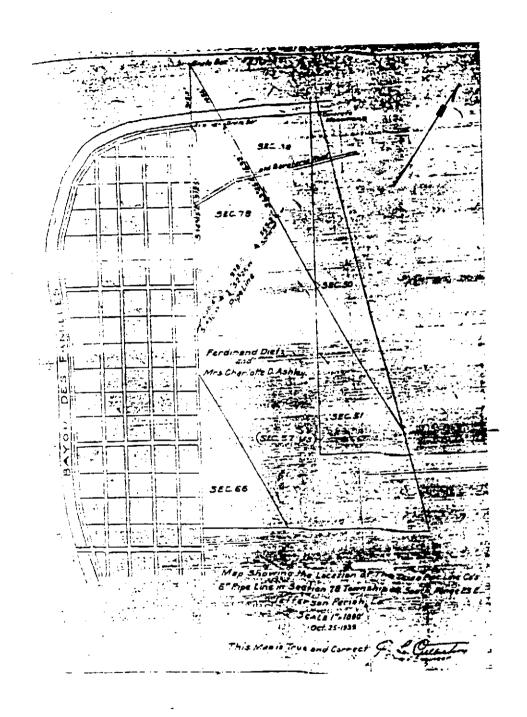
In 1931, soon after selling the highway right-of-way to the State of Louisiana, Robert Perkins granted an electricity right-of-way for the consideration of \$1.00. Again, in 1938, Louisiana Power and Light Company was granted a 25-foot easement to construct, operate and maintain electric lines near the highway. The cutting and mowing of the utility servitudes and the borders of the highway has created artificial plant communities along the highway. <sup>39</sup>

## The Texas Pipe Line Company Right-of Way.

In 1935 and in 1937, the Texas Pipe Line Company purchased the right to lay and maintain a pipeline through the study area. The pipeline right-of-way enters the study area along the west side of the Old Barataria Public Road that follows the 1768 Guerbois-Boudousquie property dividing

The right-of-way is about 20 feet wide and lies artially in the Old Barataria Road and partially in the following subdivision lots: Lots 1 through 7 of Block 1 and lots 1 through 6 in each of Blocks 2, 3, 4, 12, 13, 20, 21, 30, 31, 40, 41, 50, 51, 60, 61, 70, and 71. The right-of-way north of the junction of the Shell Road is noticeable as a cleared strip now overgrown with young trees and saplings. South of the Shell Road, the position of the right-of-way is apparently indistinguishable from the road. Two parallel pipelines are laid in the right-of-way, an eight inch oil pipeline and a six inch gas pipeline.

The pipeline right-of-way turns nearly due north at 3564 feet northwestward from the Shell Road, crosses under the Old Barataria Road, and proceeds in a straight line through the swampy roads on the backslope of the natural levee. Here, the right-of-way is thickly grown over with palmettos and some young trees. The pipeline right-of-way leaves the study area when it crosses under the protection levee at the north boundary of the park. The pipelines carried oil and gas from the many oil fields in the southern Barataria Basin to a terminus on the Texas and Pacific Railroad near the river at Marrero. 41



J. C. Culbertson, "Map Showing the Location of the Texas Pipe Line Co's 6" Pipe Line in Section 78 Township 15 South, Range 23 E., Jefferson Parish, La.," Oct. 25, 1935. Annexed to Right of Way Grant from Ferdinand H. Dietze and Mrs. Charlotte Amy Dietze, widow of Burton M. Ashley, to The Texas Pipe Line Company, recorded December 9, 1935, COB 126, f. 668, JPCH.

#### of stakes with numbered copper plates.

An unusual cultural feature that apparently dates from early post-plantation period is a plot of small stakes in numbered copper plates. The plot is located 275 feet southwest of the Old Barataria Road from a point on the road feet southeast of the Ring Levee Trail parking lot.

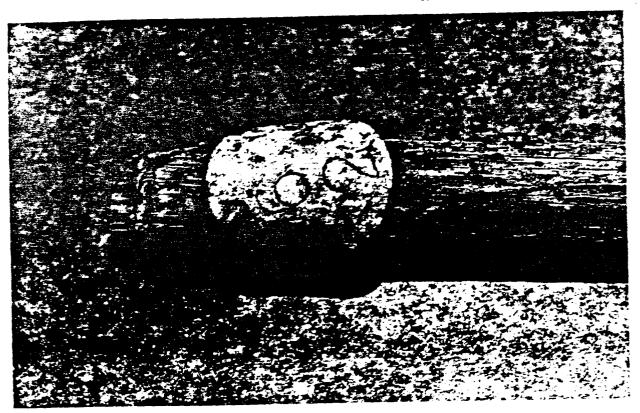
The plot measures about 15 feet by 22 feet. It appears to have been laid out to contain six rows of stakes with each row having ten stakes positioned about 18 inches apart. Only one stake remains in the sixth row; the other stakes have apparently been removed from this row.

The stakes are made from small cypress branches and measure about 37 cm in length. The copper plates are circular and measure 3.5 cm in diameter. They are engraved or stamped with numbers and have a hole through which copper wire is inserted. The wire is inserted in a hole at the top of the stake and twisted together.

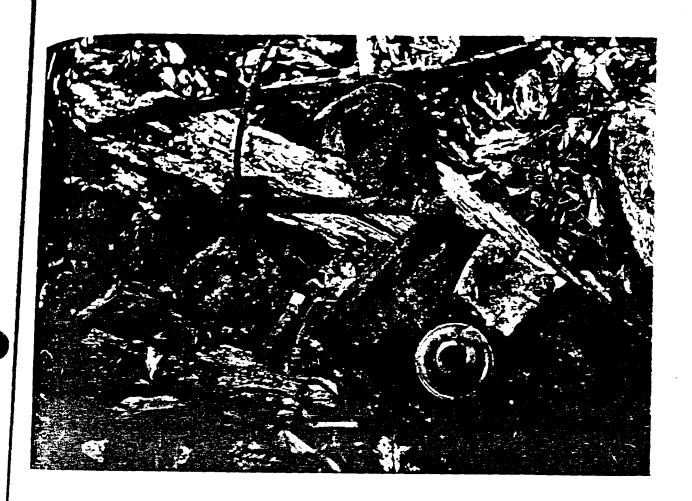
The purpose of the numbered stakes is unknown, however, they may have been used for a vegetation study. The location of the plot is in the reforested sugar cane fields. According to Louis Ehret who hunted in the wood between 1912 and 1930, the number stakes "have always been there." They are a testimony to the durability of cypress wood. 42



Unit Manager Oscar Rodriguez examines rows of cypress stakes with numbered copper plates, see map of Cultural features of the Post-Plantation Period to World War II. Looking N. 4/86.



Cypress stake with numbered copper plate, see map of Cultural features of the Post-Plantation Period to World War II.



, e,

Artifacts at the site of the cabin of a Negro named Wright: parts of a cast-iron bedstead, the glass base of an oil lamp, a smashed copper cup, part of a cast-iron stove, a broken cast-iron pot with legs, and what appear to be lumps of boussiage. See site No. 4, Cultural Features of the Post-Plantation Period to World War II. 3/86.

## BUILDING SITES AND ASSOCIATED FEATURES OF THE POST-PLANTATION PERIOD TO WORLD WAR II

### 1. Site of the cabin of a Negro named Hennison.

According to Louis Ehret, the Hennison cabin site is located about 1000 feet north of the Ring Levee Parking Lot, "at the edge of the swamp." Mr. Ehret remembers that, in about 1918 or 1920, a Negro hunter and trapper named Hennison lived at this site in a log slab cabin which he built for himself. 43

A log slab is the outside piece cut from a log in squaring it. The slab is flat on one side and rounded on the other, and it often still bears its bark. Slabs could frequently be obtained at no cost from the refuse of sawmills. They have long been used to construct walls and roofs of rustic buildings. The flat side of the slabs are nailed either horizontally or vertically to the wooden frames of buildings.

In the Barataria region, such makeshift dwellings were often called "camps" even though they served as the occupant's year-round home. They were perhaps so-called because of the temporary appearance of the construction, or because the inhabitants were frequently squatters.

Hennison is said to have been a squatter, and he lived alone. However, He and other apparent squatters may have been given permission to live on the land by the owners of the large wooded tract composed of Sections 51, 55, and 57 in T15S R23E, the Rebentsich-Mehnert-Dietze family.

The location of the cabin, as described by Louis Ehret, would have been at the toe of the natural levee, in a wet area. A search was not made for possible remains of the cabin site.

## 2. Site of the cabin of a Negro called "Dad."

The cabin site is located at the edge of the Ring Levee Parking Lot, across or near the oil field road which proceeds from the parking lot in an eastward direction, and opposite the junction of the Shell Road and the Old Barataria Public Road. According to Louis Ehret, who visited the area between 1912 and 1930, the cabin of an elderly Negro called "Dad" was located here. Both Louis Ehret and Frank Ehret, Jr. frequently passed the cabin on the Old Barataria Road, which was then part of State Highway 30, and they remember the Negro as a squatter who lived alone. They say he was a moss-picker and trapper, and he "lived off the land" by hunting and fishing. He also cut and sold railroad cross-ties, and fence posts and pickets. He used a yoke of oxen to pull from the edge of the swamp the cypress logs that he cut into cross-ties and fence posts. The Negro cut the logs in the swamp and floated them out on "tie runs," or channels made by dragging logs through the swamp. He also used the oxen to pull a wooden slide or sleigh constructed of eight-foot-long boards which he loaded with moss that he picked in the swamps and in the woods. 45

Louis Ehret describes Dad's cabin as a small shack constructed of cypress slabs and having a dirt floor. A metal trash burner served as Dad's cooking stove. The cabin site may have been overlaid by the shell-over-planks oil road and, later, by additional shell deposited by the NPS for the Ring Levee Parking Lot. The site may remain intact beneath the road and parking lot, or it may have been disturbed by earth-moving during the oil operations. A few pieces of brick and a piece of roof slate were observed just southeast of the parking lot. At a distance of 100 feet to the southeast of the approximate cabin site is a bulldozed pile of mud and refuse about three feet high, a product of oil exploration work in the area. If the pile consists of surface scrapings, it may contain artifacts associated with the Negro's occupation. Several hundred feet northeast of the approximate cabin site is another pile of mud, a linear elevation about one or two feet high. Surface artifacts noted on this elevation may derive from the nearby habitation of the Negro. These include brick fragments resembling the color and consistency of bricks located on the plantation building sites; thin white ceramic or porcelain sherds; thick white ceramic sherds; clam and oyster shells; and large, round, bent nails. These materials resemble those noted on the site of the Christmas Plantation laborer's quarters row on the south side of the Shell Road. The Negro may have scavaged and reused plantation building materials

articles. It is also possible that the old Negro was a remer hired field hand who worked on the plantation but will in the woods just outside of the boundary of the mantation.

Aerial photographs dating back to 1945 show a partial clearing at the point where the Shell Road meets the Old barataria Road. The clearing appears to have been about 300 feet in diameter and may have been made by the Negro as a work area. In more recent years, the area was used as an unofficial dump. This trash deposit was largely removed by the NPS, although armadillos sometimes unearth trash that remains beneath a layer of top soil laid by the NPS on the north side of the parking lot. Any archaeological investigation in this area should keep in mind that the late Spanish Period dwelling of Louis Pelteau may have also been located in this vicinity.

### 3. Site of the cabin of a Negro cowboy named Dennis.

According to Louis Ehret and Frank Ehret, Jr., the approximate site of the cabin is located on the crest of the east bank natural levee, approximately 200 feet west of the Lafitte-Larose Highway and 600 feet northwest of the eastern boundary of the Christmas Plantation and the Old Barataria Public Road that runs along it. A large ring levee oil drill site is located on the approximate site of the cabin, and the site is much disturbed. Occasional scattered pieces of brick, concrete, and metal in this area may entirely

logical search may locate artifacts or remains associated with the Negro dwelling and perhaps more precisely locate its former site.

According to Louis Ehret and Frank Ehret, Jr., Dennis worked for the land owners, the Rebentsich-Mehnert-Dietze family, "running cattle in the Big Woods." The Negro had a little red horse and some dogs that he used to herd the cattle. He also cut railroad cross-ties, hunted, fished, and trapped. He is said to have had "two wives," one with brown skin and the other with black skin, who lived together with him in the cabin. 47

The cabin was about 25 or 30 feet long. It was constructed by Dennis of cypress that he cut himself. The roof was covered with metal. Large metal drums situated under the overhang of the roof collected rain water that drained from the roof for drinking water, for household use, and for the animals. 48

## 4. Site of the cabin of a Negro named Wright.

The cabin site is located near the crest of the east bank natural levee, about 200 feet northwest of the park boundary at the powerline right-of-way and about 100 feet northeast of the Old Barataria Public Road that bordered the former Christmas Plantation eastern property line. According to Louis Ehret and Frank Ehret, Jr., this was the site

the cabin occupied by a Negro tie cutter, trapper, and moss-picker named Wright and his wife. The hand-cut cypress, metal roofed cabin resembled Dennis' cabin, described above, and it was about the same size. 49

Artifacts remaining on the surface of the ground at the cabin site include brick fragments, pieces of an old cast-iron bedstead, the glass base of an oil lamp, a smashed copper cup, parts of a cast-iron stove, a broken cast-iron pot with legs, and what appear to be lumps of boussiage, a mixture of mud and moss traditionally used in Louisiana for wall insulation and chimney construction. Nearby are two small, round ponds ringed by small levees less than a foot high. These ponds are obviously man-made. They could date back to the Negro's occupation, or they could be associated with oil operations of the 1960s. Archaeological investigation may determine if the site of the cabin has been disturbed by earth-moving during oil exploration work, or if the cabin foundations remain intact beneath the ground.

The Wrights are thought to have been squatters.

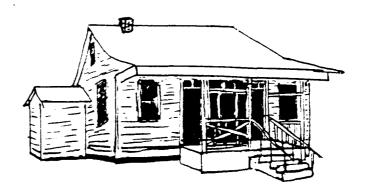
However, they and all the other Negroes who lived on the Rebentsich-Mehnert-Dietze property may have dwelled there by agreement with the owners. They may have helped to watch the owner's cattle and protect the property from interlopers.

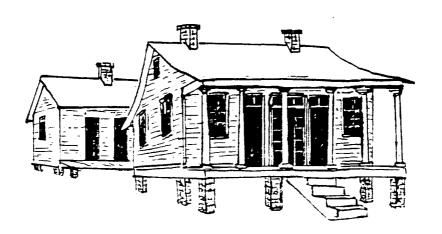
# The William Comez House site.

The house site is located on the south side of the Shell Road, 200 feet northeast of the junction of the Shell Road and Highway 45.

In 1912, William Gomez purchased five acres of land planted in pecan trees on the west bank of the natural levee of Bayou des Familles, south of the present route of the Shell Road and between the bayou and present-day Highway 45, from the Jefferson Land Company for \$1,000. His acquisition included the location of one of the houses of the Christmas Plantation, and the house was probably extant at the time of purchase. (See No. le on map of the Christmas Plantation Headquarters area.)

Soon after acquiring the property, William Gomez and his wife, Mary Eskine Gomez, are known to have been living in the house that faced the Shell Road. They resided in the house until they sold the property to Robert Logan Perkins in 1920 for \$8000.00. It is not known how long the plantation house that was located farther downstream remained standing. It may be speculated that the Gomez House was the plantation house, moved to the new site and perhaps somewhat remodeled. Stylistically, the house could have dated from the establishment of the Christmas Plantation in 1866. Oral tradition has long identified the Gomez House as the "Christmas Plantation Overseer's House," even though no house was located on the site of the Gomez House during the late plantation period. 51





The William Gomez House. Above: sketch showing appearance of house shortly before being destroyed by fire in 1983, drawn from photographs made by Talluto Real Estate Appraiser, filed with Tract No. 104-18, Land Acquisition Office, National Park Service Southwest Regional Office, Santa Fe. Below: conjectured restoration as a galleried, villa-style, center-hall cottage with detached kitchen on the Christmas Plantation before removal to a new site by Gomez in 1912.

Photographs made in 1983 show that the Gomez House was small villa style cottage, an American modification of the creole cottage type. The villa or center-hall house was popular in Louisiana in the mid-19th century. Such dwellings were a manifestation of the Greek Revival Style brought to Louisiana from the Eastern United States. Many pretentious raised villas were erected as plantation houses. However, modest cottages in urban and rural areas also incorporated the center hall and the symmetrical facade of the fashionable style. Such cottages combined Louisiana colonial and American building traditions. 52

Stylistically, the Gomez House would have appeared more appropriate if raised a half-story on brick piers. What seems to be the remains of brick piers can be seen in the ground at the former location of the plantation house.

Gomez possibly removed the plantation house from its piers, moved it to a new location, and placed it on the ground.

As it appeared in 1983, the frame house was rectangular in plan and had small wings at the side and rear. The gabled roof, which had a slight double pitch characteristic of eighteenth and nineteenth century buildings in south Louisiana, was covered with corrugated metal. A gallery was inset across the front facade which contained symmetrical fenestration consisting of a central door flanked by a window and a door on each side. In the Greek Revival Style tradition, the central door had a transom and side lights,

and it apparently opened to a central hall. Photographs of the house are not clear enough to distinguish the type of mouldings around the door and windows. The windows were fitted with double-hung sash. A brick chimney was located near the northeast gabled end.

Robert Logan Perkins, who purchased the property upon which the house is situated, was the son of Robert J.

Perkins who acquired most of the rest of the former

Christmas Plantation as well as other Barataria properties.

The elder Perkins held these properties until the 1930s but did not live in Barataria. He was a prominent New Orleans attorney. To guard the former Christmas Plantation property, Perkins employed a watchwoman, a Miss Harris, who lived in the former Gomez House. Miss Harris carried a gun, punctured the tires of trespassers' vehicles with an ice pick, and put sugar in their gas tanks. 53

The house burned in 1983, and the NPS subsequently removed most of the debris of the house. The base of the brick chimney, concrete block foundation, and concrete flooring remain, along with a scattering of bricks, nails, and other building materials. The only early building materials noted in the area are some of the "H" imprinted bricks that are found on Christmas Plantation building sites. 54

#### Site of a Christmas Plantation house.

The site is located at the northeast corner of the intersection of the Shell Road and Highway. It is fully described in No. 1b of "Structures on the Christmas Plantation." The house undoubtedly remained standing for some years after the end of the plantation period. A cottage at this site, which probably resembled the Gomez House, was demolished in 1953. It was probably the same cottage that stood on the site during the plantation years. 55

The land in the area north of the Shell Road was not among the parcels that were ever sold, and it is therefore unlikely that a substantial new cottage was built there in the post-plantation period. The cottage was occupied in those years by a Negro family, and other Negro families lived in nearby cabins. Frank Ehret, Jr. remembers that the Mitchells and the Dorseys lived in these dwellings in the 1920s. They were moss pickers. 56

#### 7. Site of a row of cabins.

The site of the row of cabins is located on the west bank of Bayou des Familles, northwest of the crossing of the Shell Road and about 100 feet from the bayou. According to Louis Ehret and Frank Ehret, Jr., a row of several cabins located here were occupied by Negro moss pickers in the post-plantation period. These buildings may have been the plantation laborers' quarters originally located on the opposite side of the bayou. The buildings and the site are

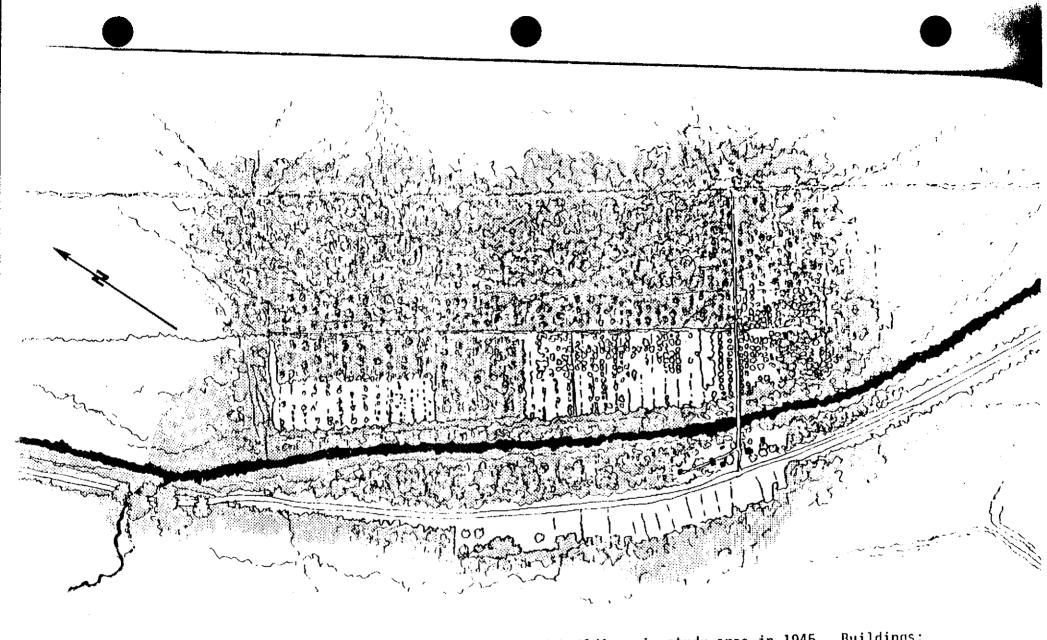
fully described in No. 3 of "Structures on the Christmas Plantation." 57

#### 8. Possible house site.

The site is located at the corner of the intersection of the eastern Christmas Plantation property line and Highway 45. It is situated about 100 feet from the highway. A road or driveway leads from the highway to the site. The location was used as an unofficial dump in recent years, and most of the trash was removed by the NPS. Some debris is still scattered about the area.

Neither documentation nor oral tradition locates a building on this site, however, several features suggest that a house may have been located here. Old bricks embedded in the ground have the appearance of a foundation or walkway. Several exotic plants growing on the site suggest the remains of an ornamental garden: two large clusters of bamboo, a Japanese plum, and asparagus fern. It is possible, however, that these plants were dumped on the site and took root. Four large live oaks grow somewhat symmetrically on the site.

An oil pipeline passes near the site and is identifiable by a linear depression in the ground. A cathodic protection check point instrument protrudes from the pipeline near the possible house site. The road that leads to the site could have been made in 1968 when the pipeline was laid, and the road probably prompted use of the area as



Sketch of pecan orchard, truck garden fields, and buildings in study area in 1945. Buildings: facing south side of Shell Road, Gomez House; northwest corner of junction of Shell Road and highway, possible plantation period cottage; north side of Shell Road near bayou, possible plantation quarters building; other structures unidentified. Scale: 1.25 inch = 1,000 feet. From aerial photograph flown 5-17-45 by the National Ocean Survey, C & GS, 20, La. 1250, 29, 90, C2790, National Archives.

SCALE 400 FEET

#### STRUCTURES DATING FROM WORLD WAR II TO 1985

- 1. CARETAKER'S HOUSE, OLD GOMEZ HOUSE, POSSIBLE CHRISTMAS PLANTATION HOUSE.
- 2. GARAGE AND SHED.
- 3. COTTAGE, POSSIBLE CHRISTMAS PLANTATION HOUSE.
- 4. POSSIBLE CHRISTMAS PLANTATION QUARTERS BUILDING.

(OTHER STRUCTURES ON WEST BANK, AS SHOWN ON VARIOUS AERIAL PHOTOGRAPHS AND MAPS FROM 1945 TO 1985, ARE UNIDENTIFIED.)

- 5. SAWMILL.
- 6. SAWMILL OPERATOR'S HOUSE.
- 7. POSSIBLE HOUSE.
- 8. MULE CORRAL.
- 9. MARRERO ROD AND GUN CLUB CABIN.
- 10. HOUSE TRAILER.
- 11. "GUN CLUB LOT."

a dump. Archaeological testing would be needed to determine if a house site is located at this place and, if so, the period of its construction.

### CULTURAL FEATURES POST-DATING WORLD WAR II

As described earlier in the chapter entitled "The Patchwork of Hardwood Succession in the Study Area," most of the former Christmas Plantation had reforested by the time of World War II. Aerial photographs of 1945 show that only about 25 acres remained in cultivated truck gardens and pecan orchards. The photographs show the rest of the study as densely forested, with faint linear traces of logging operations as the only sign of human activity in the woods. However, the forests also continued to be used for grazing livestock, hunting, trapping, and the gathering of Spanish moss.

The 1945 aerial photographs show six buildings clustered at the intersection of the Shell Road and Highway 45 (then Highway 30), between the highway and the bayou. Several of these buildings have been described earlier in this study as two cottages and a quarters building probably remaining from the Christmas Plantation. The other structures have not been identified, and later aerial photographs show other unidentified structures which may have been sheds, barns, garages, or house trailers.

The old Gomez House was still being used as the house of the caretaker employed by the Canal Bank and Trust

Trepagnier was the caretaker in the years following World War II. He cultivated vegetables in portions of the pecan orchard, which helped to maintain those parts of the orchard. His farm plots were largely located to the northwest of the Shell Road and Third Road and across the highway where the Visitor Center is located today. He planted potatoes, beans, cabbage, beets, turnips, green onions, corn, lettuce, carrots, blackeye peas, and peppers. Deer from the surrounding woods would frequently raid the gardens. Trepagnier sold the vegetables and pecans at the French Market in New Orleans. After the crops were harvested, cattle were put on the land to help keep the orchards clear. 58

Jake Trepagnier also collected fees from moss pickers who paid to gather truckloads of Spanish moss from trees on the property and from hunters who wished to hunt on the property. Trepagnier is said to have killed the last black bear known to have lived in the Barataria Region when it entered the gallery of his house in the late 1960s. The wounded bear ran into Bayou des Familles downstream from the bridge crossing, died there, and was never recovered. 59

The cottage that stood across the road from the caretaker's house was destroyed about 1953. In the late 1970s, the caretaker's cottage was abandoned and stood vacant for some time. According to Mrs. Mary Dauenhauer Erlinger who owned the property, the house was then occupied

by squatters. Two couples and at least one child lived in the house. As many as 100 rabbits, which they raised, hopped about the premises. They cooked the rabbits on an iron rack in the fireplace of the house. They kept a boat in front of the house and probably used it to fish in the nearby lakes. A big goose attacked all strangers who ventured onto the property. 60

At the rear of the house, the squatters farmed a small plot which they enclosed with a tall fence of sheet metal supported by wooden posts and cast-iron pipes. The metal enclosure kept wild animals and the rabbits from raiding the garden. The furrows of this former garden plot are visible on the ground. Between the farm plot and the highway was an old wood and metal tool shed and another, smaller metal enclosure which served as a pig pen. 61

The house was destroyed by fire on Halloween night, 1983, soon after the squatters had been evicted by the Sheriff of Jefferson Parish. The brick chimmey remained standing. It was knocked down by the NPS, and the debris was cleared from the property. The brick base of the chimney, concrete block foundation, and concrete flooring remain on the house site. 62

Aerial photographs of the 1960s show several buildings located at the southwest corner of the Shell Road and the location of Fourth Road, near the bayou. These structures were not situated on subdivision lots that had ever been

was undoubtedly under contract to the owner of the subdivision, Canal Assets, Incorporated, a company formed in liquidation of the Canal Bank and Trust Company.

According to A. J. Smith who used to live in the Barataria area, the building at the corner of the Shell Road and Fourth Road was a sawmill operated by a gasoline engine. It faced the Shell Road, and the sawmill operator's house was situated on the bayou side of the mill. It also faced the Shell Road. A third structure was located about 200 feet to the southeast of these buildings. Debris in this area, including children's toys, suggests that this building was a dwelling. Aerial photographs appear to show that it had been demolished by the early 1970s. The other two buildings remained standing until more recent years. Their cement and wooden beam foundations still exist, along with scattered refuse dating from their occupation. The NPS recently cleared most of the trash from this area. 63

Aerial photographs of the 1970s show that the last area of the pecan orchard to be kept open by cultivation under the trees was a small plot at the northwest corner of the Shell Road and the bayou. The sawmill operator may have farmed this patch. In the pecan orchard, near the Shell Road and across the road from the sawmill, was a mule corral. Some of the large corral posts remain standing. According to A. J. Smith, the sawmill operator used the

mules to help haul timber out of the woods, but he also kept them "just because he liked them."64

Two blocks up the Shell Road, other structures were erected in the 1970s by a hunting club. The "Gun Club Lot" faced the north side the Shell Road between First and Second Roads and occupied the whole of Block or Square 29 of the subdivision. The Marrero Rod and Gun Club, Incorporated, purchased the eastern half of the square in 1973. The western half of the square was purchased in the same year by Slattery P. Henry of Marrero and was apparently also used by the gun club. 65

The improvements on Henry's portion of the square, consisted of an old, deteriorated house trailer and a small shed. Those on the gun club's half of the square consisted of a 32 by 24 foot frame cabin, an 8 by 12 foot frame shed with a dirt floor, and a galvanized iron privy. 66

The cabin was raised on concrete blocks and had a corrugated metal roof with gabled ends. The exterior walls were covered with horizontal boards. The interior was divided into two rooms, a bedroom and a kitchen. The floors were made of plywood laid on joists. 67

The only utility service available to the people who lived along the Shell Road was electricity. In 1970, Louisiana Power and Light Company installed an electricity line on wooden poles along the south side of the Shell Road and along the Old Barataria Road bordering Squares 30 and 31.68

Water was carried in and collected in cisterns. On the pun club lot, water for washing dishes and cleaning game, but not for drinking, was collected in two 55-gallon iron drums which were elevated on a platform under the eaves of the roof. Rain water runoff from the roof collected in the drums which were covered with screens to keep out insects and debris. 69

The NPS removed all the structures from the Gun Club
Lot. The gun club property was partially cutover and is in
the process of regrowth. During the years that the NPS was
in process of acquiring the lands that were to constitute
the park unit, the gun club members were able to hunt on the
new public lands. Spent bullet shells are plentiful in the
area.

Recent cultural features that border the study area and the park boundaries should be mentioned. A 120-foot electric powerline right-of-way borders the south end of the study area and forms the boundary of the park in this location. The right-of-way was granted in 1965 by Canal Assets, Incorporated to Louisiana Power and Light Company. It follows the property line first established in 1794 as the division between the Spanish land grants of Louis Pelteau and John Normand. It lies just inside the former Pelteau property and is cleared of trees. 70

The Lafitte-Larose Highway (State Highway 3134) borders the east side of the study area and also forms the boundary of the park. It is a four-lane asphalt highway. The

right-of-way in this location was purchased by the State in 1974. A public water line runs along the west side of the highway, just inside the park property. 71

The northeast side of the study area is bordered by a levee and a canal. The park boundary line lies on the south side of the levee. The boundary line, levee and canal follow another 1794 property line, a Spanish land grant to Antonio Vart. The canal was dug as a pipeline canal for oil exploration work in the 1960s. The 50-foot-wide levee that was built along the south side of the canal is called the Lower Estelle Protection Levee and the Hurricane Protection Levee. It has also been called the V-Shaped Levee because it follows the v-shape of the 1794 property line. 72

## ENDNOTES THE PAPER SUBDIVISION

For histories of the development of subdivisions in Jefferson Parish see Betsy Swanson, Historic Jefferson Parish (Gretna, Louisiana: Pelican sublishing Company, 1975), pp. 100-26; pp. 130-31; and Henry C. Bezou, merairie, A Tongue of Land to Pasture (Gretna, Louisiana: Pelican Publishing Company, 1973), pp. 64-86.

- See the pattern of the legal divisions of land in the area of the Barataria Unit on Edgar Tobin Aerial Surveys, Map No. Y-3898, prepared for the National Park Service, 1964, Land Acquisition Office, Southwest Regional Office, National Park Service, Santa Fe.
- 3. Deposit of Plan and Documents by the Jefferson Land Company of Maine, February 10, 1911, Alexis Brian, notary, NONA.
- 4. Sale of plantation, Charles J. Brown to George H. T. Shaw, March 31, 1903, A. Walker Cooper, notary, NONA; Sale of plantation, George H.T. Shaw to J.E. Hartenbower, May 28, 1904, C.O.B. 28, folio 239, JPCH; Sale of plantations, G.H.T. Shaw to Jefferson Land Company, September 23, 1909, C.O.B. 28, folio 722, JPCH; Sale of plantation, Old Plantation Company, Limited, to Jefferson Land Company, October 8, 1909, C.O.B. 28, folio 725 and C.O.B. 28, folio 728, JPCH.
- 5. J.W.T. Stephens, "Map of Property of The Jefferson Land Company in The Parish of Jefferson, Louisiana, for sale by Burton D. Hurd Company, 204 Dearborn Street, Chicago, Illinois," March, 1910, annexed to Act of Deposit, Alexis Brian, notary, NONA.
- 6. Ibid.
- Ibid; the early acts of sale of lots mention "the planting of pecan trees," see, for example, sale of Block 44 by the Jefferson Land Company to William Laferriere, April 18, 1911, C.O.B. 33, folio 715, JPCH.
- 8. Map of Segment 104, Jean Lafitte National Historical Park and Preserve (Barataria Unit), Division of Land Acquisition, Southwest Regional Office, National Park Service, Santa Fe.
- 9. Sale of land, Ottawa Banking and Trust Company, Ottawa, Illinois, Jefferson Land Company Bankruptcy to Robert J. Perkins, June 14, 1919, C.O.B. 45, folio 443, JPCH.
- 10. Sale of land, Jefferson Land Company to William Gomez, February 2, 1912, C.O.B. 33, folio 708, JPCH; Sale of land, William Gomez to Robert Logan Perkins, June 5, 1920, C.O.B. 48, folio 289, JPCH.
- 11. Alcee Fortier, Louisiana, vol. 3 (Chicago: Century Historical Association, 1914), pp. 352-53.

- Lease, Robert J. Perkins to the Delaware Louisiana Fur Trapping Company Incorporated, November 12, 1925, C.O.B. 71, folio 670, JPCH; lease, Perkins to Kelly Land Company of Texas, June 28, 1928, C.O.B. 103, folio 525, JPCH; Sheriff's sale, Bankruptcy of Robert S. Perkins to Canal Bank and Trust Company, C.O.B. 28, folio 728, JPCH.
- 13. Percy Prestenbach, Sr., and Frank Ehret Jr., interviews with Betsy Swanson, 1986.
- 14. Tax sale, Robert L. Perkins to Louis L. Dauenhauer, September 16, 1939, C.O.B. 154, folio 494; Mrs. Mary Dauenhauer Erlinger, interview with Betsy Swanson, 1986.
- 15. Mary C. Ehret, "The Jean Lafitte National Historical Park: Preserving Culture, History, Ethnicity and Wetlands of the Mississippi River Delta Region," photocopy, paper prepared for Urban Studies 4400, University of New Orleans, 1983.
- 16. Robert W. Merrick, Inc., Realtors and Consultants, Legal Description of Tract No. 104-39, Land Acquisition Office, National Park Service, Southwest Region, Santa Fe.
- 17. Roy M. Schwarz, Jr., "Appraisal of Portion of Brown or Christmas Plantation," prepared for Cross Timbers Development Corporation, April 11, 1980, filed with Tract 104-39, Land Acquisition Office, National Park Service, Southwest Region, Santa Fe.
- 18. Stephen L. Guice and Company, Incorporated, "Appraisal Report, Christmas Plantation," 1980, filed with Tract No. 104-39, Land Acquisition Office, National Park Service, Southwest Region, Santa Fe.
- 19. Louis Ehret and Frank Ehret, Jr., interviews with Betsy Swanson, 1986.
- 20. Ibid; Sale of land, William Rebentisch to Charlotte Rebentisch, widow of Hugo Mehnert, June 6, 1902, John C. Tillotson, notary, JPCH; Sale of land, Ferdinand H. Dietze, Sr. and Charlotte Amy Dietze to Harold W. Adams, March 24, 1970, John J. Moliason, notary, JPCH.
- 21. Dietze to Adams; Succession of Mrs. Charlotte Rebentisch, widow of Hugo Mehnert, filed April 14, 1927, Case No. 168272, Civil District Court, Parish of Orleans, registered in C.O.B. 84, folio 138, JPCH.
- 22. Assumption Sale of Property, Harold W. Adams to Dr. Bernard A. Goldman, et al., March 24, 1970, John J. Molaison, notary, JPCH; Sale of property, Goldman, et al. to The United States of America, April 14, 1982, Diane M. Gravois, notary, JPCH.
- 23. Act of Transfer, Jung, Inc., to Arthur L. Jung, Jr., January 22, 1959, C.O.B. 467, folio 123, JPCH; Sale of land, Ames Farmland Company to Crescent Bed Company, December 9, 1935, C.O.B. 127, folio 44, JPCH; Sale of land, South Side Plantation Co., Inc. to Ames Farm Land Co., Inc., C.O.B. 43, folio 394, JPCH.

- Louis Voss, The History of the German Society of New Orleans (New Orleans: Sendker Printing Service, Inc., 1927), p. 67.
- 5. Sale of land, Crescent Bed Company, Inc., to Jung, Inc., December 11, 1949, C.O.B. 248, folio 363, JPCH; Estate of Peter Jung, Inc. to Arthur L. Jung, Jr., January 22, 1959, C.O.B. 467, folio 123, JPCH.
- 26. Early acts of sale of a subdivision lots mention "the planting of pecan trees," see, for example, Jefferson Land Company to William Laferriere, April 18, 1911, C.O.B. 33, folio 715, JPCH; Versailles Pecan Groves Will Make You Independent Only a Few Minutes from Canal Street (New Orleans, Gaidry Land Company, Inc., ca. 1916).
- Pecan Growing and Pecan Soil in Louisiana," The Texas and Pacific Quarterly, vol. 15, no. 1, January 1912; Louis Ehret and Frank Ehret, Jr., interviews with Betsy Swanson, 1986.
- 28. J.W.T. Stephens, "Map of Property of the Jefferson Land Company in the Parish of Jefferson, Louisiana, for sale by Burton D. Hurd Co., 204 Dearborn Street, Chicago, Illinois," March, 1910, attached to act of February 10, 1911, Alexis Brian, notary, NONA.
- The position of the plantation road bridge crossing in relation to the subdivision Old Road is shown on Stephens' 1910 map. The archeological report erroneously imagines that the crushed-shell-and-brick plantation road bed represents recent "fill for the existing Christmas Road," see R. Christopher Goodwin and Associates, Inc., "Level II Archeological Survey, Big Woods Development Area, Environmental Educational Center-Phase I, Barataria Unit, Jean Lafitte National Historical Park, Jefferson Parish, Louisiana," August 6, 1987, Draft Report prepared for the National Park Service, Southwest Region, Santa Fe.
- 30. "Map of Part of Jefferson Parish Showing 'Ames Farms' and other land owned and controlled by Meyer Eiseman, 722 Common Street, New Orleans," August 9, 1918, Plan Book 6, folio 120, F37D, JPCH.
- 31. Louis Ehret, interivew with Betsy Swanson, 1986.
- 32. Copies of old State Highway maps are housed in LC/TUL; Frank Ehret, Jr., "My Childhood Association with the Roads in the Brown Plantation and Surrounding Areas, Now the Barataria Unit of the Jean Lafitte National Historical Park," unpublished manuscript in the possession of the author, 1986.
- 33. Frank Ehret, J., interview with Betsy Swanson, 1986.
- 34. Ibid.

- 35. Frank Ehret, Jr., "My Childhood Association with the Roads in the Brown Plantation and Surrounding Areas."
- Resolution of the Louisiana Highway Commission, October 19, 1930, attached to act of sale of right-of-way, Robert J. Perkins to the State of Louisiana, October 29, 1930, C.O.B. 108, folio 682, JPCH.
- 37. Ibid; Frank Ehret, Jr., interview with Betsy Swanson, 1986.
- 38. South Central Bell right-of-way permits, C.O.B. 78, folio 220; C.O.B. 142, folio 535; C.O.B. 145, folio 173; C.O.B. 179, folio 651, JPCH.
- 39. Louisiana Power and Light right-of-way permits, C.O.B. 109, folio 247; and C.O.B. 142, folio 535, JPCH.
- Texas Company right to lay and maintain pipelines, Ocotber 4, 1935, C.O.B. 126, folio 665; October 30, 1935, C.O.B. 126, folio 668; and February 26, 1937, C.O.B. 136, folio 60, JPCH; G.O. Coignet, Louisiana Geological Survey, "Oil and Gas Map of Louisiana," published by Louisiana Department of Conservation, October, 1947, map coll., UNO; Walker and Avery, Inc., "Memo to Mr. Allen Samuels regarding Christmas Plantation property," February 7, 1980, attached to Stephen L. Guice and Co. Inc., "Appraisal Report," filed with Jela L1425, tract 104-39, Land Acquisition Office, Southwest Regional Office, National Park Service, Santa Fe.
- 41. Ibid.
- 42. Louis Ehret, interview with Betsy Swanson, 1986.
- 43. Ibid.
- 44. Ibid.
- 45. Ibid; Frank Ehret, Jr., interview with Betsy Swanson.
- 46. Ibid.
- 47. Ibid
- 48. Ibid.
- 49. Ibid.
- 50. Sale of land, Jefferson Land Compnay to William Gomez, February 2, 1912, C.O.B. 33, folio 708, JPCH.

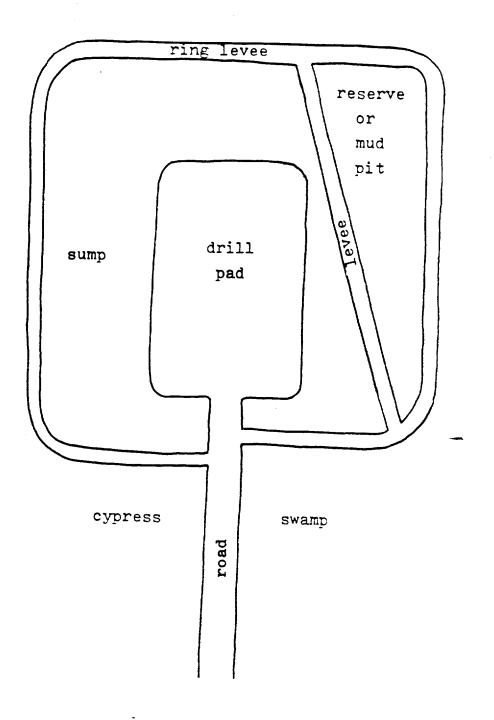
Louis Ehret, interview with Betsy Swanson, 1986; Sale of land, milliam Gomez to Robert Perkins, June 5, 1920, C.O.B. 48, folio 289, JPCH.

- Photographs of the Gomez House, made in 1983, are attached to an appraisal Review of Tract No. 104-18, on file in the Land Acquisition Office, Southwest Region, National Park Service, Santa Fe; for a description of villas and center-hall cottages see Roulhac Toledano and Mary Louise Christovich, New Orleans Architecture, Vol VI: Faubourg Treme and the Bayou Road (Gretna: Pelican Publishing Co., 1980), pp. 128-29.
- See Sheriff's sale of land, Canal Bank and Trust Co., March 16, 1934, C.O.B. 120, folio 101, JPCH; Alcee Fortier, Louisiana, vol. 3 (Chicago: Century Historical Association, 1914), pp. 352-53; Louis Ehret, interview with Betsy Swanson, 1986.
- The Gomez house burned Halloween night, 1983, Memorandum of Telephone Call, Assistant Superintendent to Kenneth Kasper, November 1, 1983, filed with Tract 104-18, Land Acquisition Office, Southwest Region, National Park Service, Santa Fe.
- 55. Percy Prestenbach, Jr., interview with Betsy Swanson, 1986.
- 56. Frank Ehret, Jr., "My Childhood Association with the Roads in the Brown Plantation and Surrounding Areas."
- 57. Frank Ehret, Jr., and Louis Ehret, interviews with Betsy Swanson, 1986.
- 58. Percy Prestenbach, Sr., Percy Prestenbach Jr., and Frank Ehret, Jr., interviews with Betsy Swanson, 1986.
- 59. Ibid.
- 60. Ibid; Mrs. Mary Dauenhauer Erlinger, interview with Betsy Swanson, 1986.
- 61. Benjamin Gerow, Chief of Maintenance, Barataria Unit, Jean Lafitte National Historical Park, interview with Betsy Swanson, 1986.
- Mrs. Mary Dauenhauer Erlinger, Frank Ehret, Jr., interviews with Betsy Swanson, 1986; Memorandum of Telephone Call, Assistant Superintendent to Kenneth Kasper, November 1, 1983, filed with Tract 104-18, Land Acquisition Office, National Park Service, Southwest Regional Office, Santa Fe.
- 63. A.J. Smith, interview with Betsy Swanson, 1986.
- 64. Ibid.
- 65. Sale of Land, Bruce A. North to Marrero Rod and Gun Club, Inc., May 8, 1983, C.O.B. 788, folio 964, JPCH; Sale of land, Bruce A. North to Slattery P. Henry, October 31, 1973, C.O.B. 803, folio 286, JPCH.

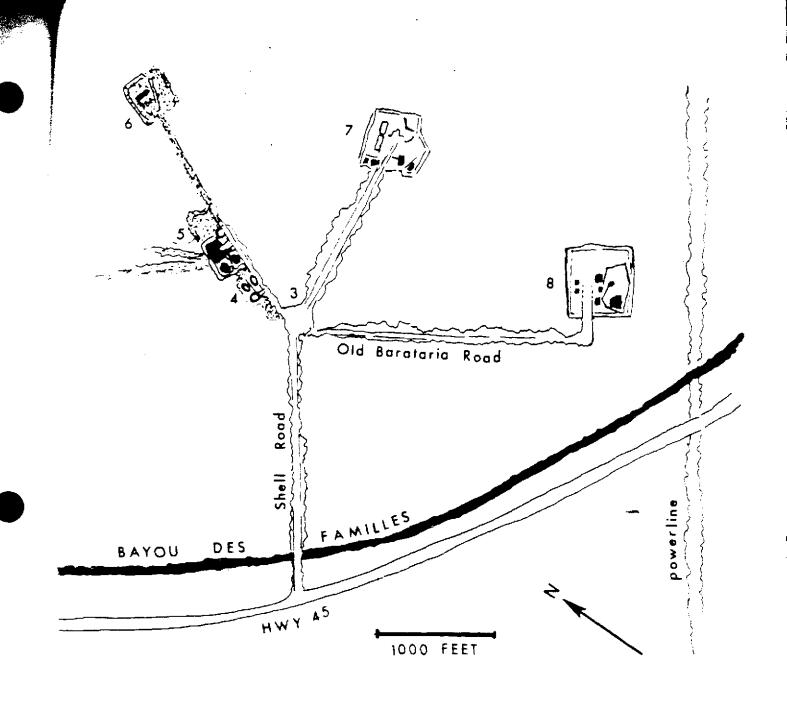
- Peter J. Talluto, Appraisal Reports, September 29, 1980 and May 11, 1983 for Tract 104-22; and February 14, 1985 for Tract 104-21; Land Acquisition Office, National Park Service, Southwest Regional Office, Santa Fe.
- 67. Talluto, Appraisal Report for Tract 104-22.
- 68. Louisiana Power and Light right-of-way Permit, November 11, 1970, C.O.B. 724, folio 720, JPCH.
- 69. Talluto, Appraisal Report for Tract 104-22.
- 70. Right-of-Way Permit, Canal Assests, Inc. to Louisiana Power and Light Company, October 7, 1965, C.O.B. 624, folio 57, JPCH; the grant line and the power line are shown on the Bertrandville, Louisiana U.S.G.S. quadrangle map, 1966, photorevised in 1972 and 1979; see also American State Papers. Public Lands, vol. 4, p.675 and vol. 3, p. 512.
- 71. Sale of property, Bernard A. Goldman, M.D., et al. to The Louisiana State Department of Highways, November 27, 1974, C.O.B. 827, folio 406, JPCH.
- 72. The Vart property line is shown on map by Carlos Trudeau, "Plano Figurativo de las tierras de Don Pedro Lartigue," November 29, 1802, copy by Barthelemy Lafon, January 16, 1806, Plan Book 106, folio 28, NONA.

CHAPTER X

THE CROWN POINT OIL FIELD

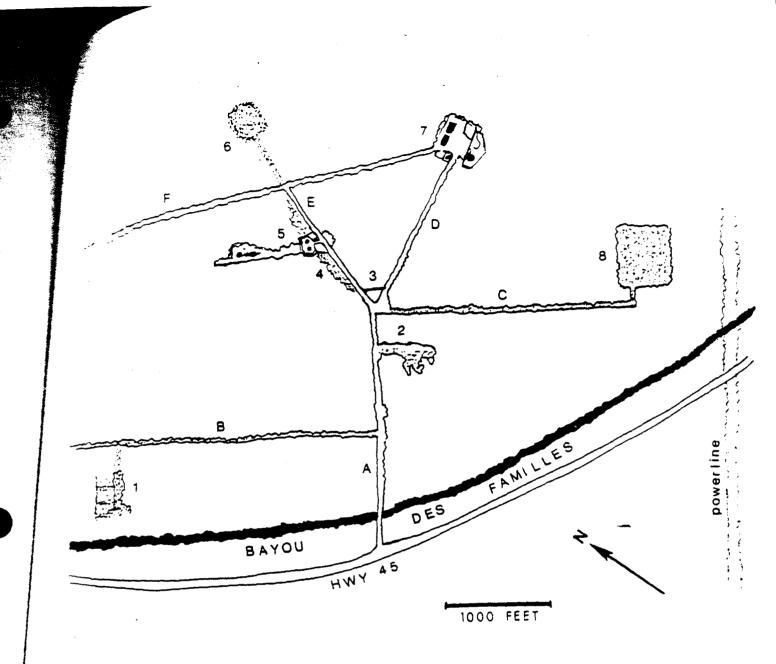


Schematic of the oil drill site at the end of the "Ring Levee Trail." Looking northeast. Not to scale.



Sketch map of oil drill sites and roads in the study area, drawn from aerial photos of November 4, 1966, Roll No. X-3, Photos 190-201, Scale of negatives - 1:38,000, Memphis District, Book 35, U. S. Army Corps of Engineers, New Orleans District.

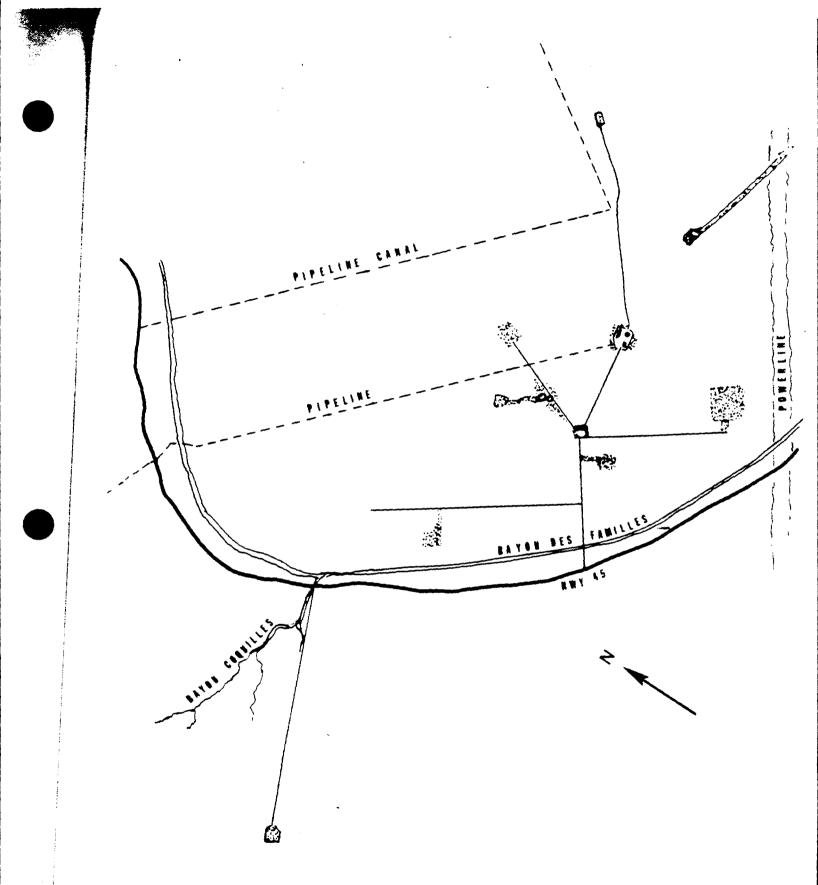
Numbers are keyed to sites in text. Shaded areas represent abandoned and overgrown sites.



Sketch map of oil drill sites, roads, and a pipeline, drawn from aerial photos of October 17, 1969, Roll 55, Photos 180-185 and 201-206, Scale of negatives - 1:20,000, U. S. Army Corps of Engineers, New Orleans District.

Numbers are keyed to sites in text. Shaded areas represent abandoned and overgrown sites.

- A Shell Road/Old Road/Christmas Plantation Headquarters Road.
- B Third Road.
- C Old Barataria Public Road.
- D Oil drill site access road.
- E Oil drill site access road/the "Ring Levee Trail."
- F Right-of-way of pipeline laid in 1968.



Tracing of oil drill sites, roads, and pipelines in the study area and its environs, from aerial photo of August 7, 1972, Roll 71-44, Photos 46-47, Scale 1:20,000, U. S. Army Corps of Engineers, New Orleans District. Shaded areas represent abandoned and overgrown sites.

Oil was discovered in Louisiana in 1901, but it was not ntil 1935 that the first oil well in Jefferson Parish "came in." The well was drilled by the Texas Company (later renamed Texaco, Incorporated) in the Barataria marshes near Bayou Dupont. At 9572 feet, it was the deepest well yet drilled in the nation, and it produced 1000 barrels a day. Named Lafitte No. 1, this was the discovery well of the Lafitte Oil Field which, by 1943, had 61 producing wells and had attained a total production of 3,634,000 barrels. 1935, the Texas Company began construction of oil and gas pipelines to their terminal or tank farm 26 miles northward on the Mississippi River at Marrero. From this terminal, crude oil could be loaded onto ships and railroad tank cars. The Texas Company pipeline right-of-way passes through the study area and is described in detail in the previous chapter. 1

The Texas Company had acquired drilling rights in a large area in Barataria in 1927, and a company geophysical crew had been exploring for oil with seismographic equipment since 1928. In 1933, the crew located the hard sub-surface upheaval or anti-cline of a salt dome. Salt domes are often found within a hundred miles of the Gulf of Mexico in south Louisiana. The domes are hollow and trap pools of oil. Hydrocarbons, or crude oil and natural gas, are formed from

result of geological forces to which the matter is subjected through countless millennia. Being lighter than water, petroleum and gas seep upwards through layers of sediment and porous rock until they are trapped by impermeable strata. Oil and gas in the salt dome formations are mixed in layers of sand, limestone, shale, and saltwater.

By 1955, nearly 200 million barrels of oil had been produced by the Lafitte Field. Meanwhile, other oil fields were opened nearby. In 1939, the California Company established the Barataria Field on Bayou Barataria near the community of Barataria. By 1943, this field had 21 wells that had produced 1,123,000 barrels of oil. In 1940, two more fields were "brought in," Delta Farms and Lake Salvador. In 1941, oil was discovered at Bay de Chene and at Westwego. Other oil fields developed during the 1940s and 1950s were Bayou de Fleur, Bayou Perot, Manila Village, and Little Lake. Pipelines emanating from most of these fields were joined with the Texas Company oil and gas pipelines that pass through the study area.<sup>2</sup>

In 1947, Humble Oil and Refining Company began the first offshore drilling operation in Jefferson Parish with the platform rig named Grand Isle No. 1, located in 50 feet of water seven miles out from Grand Isle. Within a few years, Humble had drilled 35 offshore wells nearby.

The oil and gas industry brought progress and prosperity to Jefferson Parish as well as to the whole

related businesses followed the oil companies to Jefferson parish. Many of these concerns established themselves along the banks of the Harvey Canal, which by the early twentieth century had become the principal water route to Barataria. The oil industry also brought modern development and many changes to the rustic fishing and farming communities of Barataria. By 1959, Jefferson Parish had 20 inland oil fields with 292 wells producing 27,304 barrels a day. Monthly production averaged about two and a half million dollars worth of crude oil. In addition, the oil fields produced about 46,800 million cubic feet of natural gas a day.

Oil and gas were not discovered within the boundaries of the present Barataria Unit of the Jean Lafitte National Historical Park until about 1960. At that time, the Crown Point Oil Field was opened. It lies partially within the park and the study area. The name of the oil field was taken from the nearby community of Crown Point which is located on the point of land west of the confluence of Bayous des Familles and Barataria that was crossed by the lower property line of the original 20-arpent tract obtained by the King of Spain to establish the Canary Islander settlement in 1779 (see Chapter III, "La Población de Barataria"). 3

As noted in the preceding chapter, Robert J. Perkins, whose holdings included the study area, signed an oil

exploration lease with the Kelly Land Company of Houston, Texas, in 1928. It is possible that some seismic exploration took place in the study area at that early date. The earlier methods used by exploration crews of geologists, geophysicists, and engineers consisted of exploding dynamite buried in shallow holes dug for the purpose, and recording on a seismograph the sound waves of the vibrations produced within the earth by the explosion. By performing a number of these tests over a large area, the geophysicist was able to determine the shape, location, and depth of subsurface stratum. The testing method more recently used on accessible terrain involves the use of a vibrator mounted under a truck. This device sends out low-frequency sound waves as the vibrator is pressed against the ground. The sonic reflections produced are picked up by sensitive instruments called geophones, and another instrument records the reflections.4

Early oil exploration crews frequently left open the holes made by their dynamite explosions. Some of the numerous holes, which are usually water-filled, that are located in the study area could have been caused by this method of oil exploration. Disturbance to the landscape caused by the use of the truck-mounted vibrator consists of clearing passages for the truck. Some partially cleared places in the study area that first appear in aerial photographs of the 1960s and 1970s may have been made for

purpose of seismic exploration with a truck-mounted prince of seismic exploration with a truck-mounted purpose.

The earliest specific record of the search for oil in the study area portion of what was to become the Crown Point oil Field is a mineral lease made in 1956 for Square 29 of the Jefferson Land Company, or Christmas, Subdivision. this square became known more recently as the "Gun Club Lot," and it is described in the preceding chapter. In 1956, Edna Seymour, wife of Peter Walsh, leased the square to the Anderson-Pritchard Oil Company. Seismic tests may have been done on the square, but aerial photographs show no disturbances or clearings made in the study area until the 1960s. 6

In 1960, Ferdinand H. Dietze and his sister, Charlotte Amy Dietze De Limon, who were owners of Sections 51, 55, and 57 in T15S R23E, leased this large tract to the Pan American Petroleum Corporation of Texas. In 1961 and 1962, the same oil company also leased most of the squares in the Christmas Subdivision that had been purchased by various individuals. 7

After two years of seismic exploration, the Pan
American Petroleum Corporation, together with the Westland
Oil Development Corporation, also of Texas, drilled a
"wildcat" well on the Dietze property. A wildcat is an
exploration or test well drilled in unproved territory where
no oil or gas production exists. The first Dietze wildcat
was located at the end of the park's "Ring Levee Trail." It
may have been the discovery well of the Dietze field, but

condoned and overgrown with vegetation. The well which mirst reveals the presence of a petroleum-bearing reservoir as called a "discovery well." One of two other wells located on the western side of the Ring Levee Trail may also have been the discovery well which records show was drilled in 1962 and was named the Westland No. 1 F. H. Dietze Well. The two other drill holes are shown on the "Bertrandville, La." quadrangle map of 1966 which was drafted from aerial photographs made in 1964.

After a discovery or exploration well determines the presence of hydrocarbons, it is usually necessary to drill several development wells to efficiently produce oil and gas from a subsurface formation. Development wells are spread out over an oil field in order to complete a pattern of production that would most fully exploit the reservoir of hydrocarbons. Such wells are also called exploitation wells, and several of these were drilled in the portion of the Crown Point Oil Field that lies within the study area. Aerial photographs show that most of these wells had been drilled by the mid-1960s. Production wells appear to have been located on the Dietze property, while two disturbed areas on the Christmas Subdivision property appear to represent unproductive drill sites. In 1964 and 1965, the Southern Crude Oil Company leased some of the subdivision In 1971 and 1972, Pelto Oil Company was granted mineral rights to all the unsold subdivision squares by

thdown Lands, Incorporated. However, oil exploration the christmas Subdivision property was limited, while a number of wells were drilled on the Dietze property.

In 1964, T. Harry Kaplan obtained a mineral lease for the Dietze property. The development wells were drilled under this lease and under a lease to the Estate of William G. Hellis, A Partnership, and the Sea Drilling Corporation. In 1968, a pipeline right-of-way was granted on the Dietze property and over a small corner of the Christmas property to the two last-named oil companies. The right-of-way runs in a northwest-southeast direction through the center of the study area, and it parallels the northern boundary line of the park at the Protection Levee. It is 20 feet wide and contains a buried two-and-one-half-inch pipe laid "for the transportation of gas, gas condensate and other liquid hydrocarbons" from a well in the center of the oil field to a trunk pipeline west of Highway 45.10

In 1970 and 1971, J. A. Seglund, Incorporated and P. J. Klentos acquired mineral leases to the Dietze property. Aerial photographs show that drilling operations ceased in the study area during the mid-1970s. Rigs, equipment, buildings, and most reusable materials, including some road beds, were removed from the field. Some drill sites were partially bulldozed and leveled, and most refuse was removed, buried, or burned. However, many ground features

and artifacts remain from the oil activities in the study area. 11

The following descriptions of cultural features associated with oil operations in the study area are based largely upon the explanations of Petroleum Engineer Gerald L. Schroeder, Jr., Principal Engineer of Boeing Petroleum Services, Incorporated of Metairie, who volunteered to tour the study area and provide information for this study. 12

Oil field road beds are a pronounced feature of oil operations in the study area. Oil companies frequently use existing roads in exploration and production work. Aerial photographs show that a new layer of shell was laid on the Shell Road that served as the Christmas Plantation Head-quarters Road, as the Jefferson Land Company Subdivision "Old Road," and as a connecting link in State Highway 30. The road is described in detail in earlier chapters. A new wooden bridge was erected at the Bayou des Familles crossing of the road, probably in the early 1960s. Aerial photographs also show that trees bordering the road were trimmed of their overhanging branches so that oil equipment could pass on the road. Some trees adjacent to the road may have been felled at this time.

The subdivision Third Road was partially trimmed to open it for the use of oil exploration vehicles. That part of the Old Barataria Public Road which runs south of its juncture with the Shell Road was cleared of trees for a

the south end of the study area. This road passes through was used in this condition or if a bed of shells and boards was laid upon it and later removed. Both this road and third Road have begun to grow over again with saplings and brush.

Board-and-shell road construction can be seen in the Ring Levee Trail parking lot. Frequently, shells are not used, but boards are laid lengthwise on mud roads. In wetlands, oil field roads are constructed by laying a lattice work of boards covered with river sand and shells. Sometimes borrow pits are excavated nearby for road fill, and many of the small holes near the drill site areas may have been dug for this purpose. The two drill site roads that depart in a "V" shape from the Ring Levee Parking Lot were constructed in these ways.

Oil exploration roads are temporary roads, laid down with the idea that they can be taken up. Road beds are not removed if the well produces but are maintained to provide access to the well. Sometimes roads are left even if the wells are dry. As roads in wetland areas compact and subside, they begin to sink below water levels. Much of the road that is followed by the Ring Levee Trail seems to have been removed, apparently because the well was dry. The other road led to a producing well, therefore this road was retained.

Five or six drill sites have been identified on the pretize property, and their ground features survive in various conditions. In the preparation of a drill site, the first job of the drilling contractor is to clear and level the site and to build one or more access roads and a turnaround. In wetland areas, the drill site is frequently "mucked out." The first five or ten feet of moist, organic soil is removed and river sand is hauled in to serve as a bed for the drill pad. Sometimes, the drill pad, which measures about 200 feet square, is constructed of a lattice work of boards laid in the marsh or swamp and covered with river sand and shell. The pads are raised three or four feet as a precaution against floods. Levees are built to ring a wide area around the drill pad and contain any spill from the well.

Adjacent to the drill pad, the drilling contractor excavates and levees a large pit, called a reserve pit, to be used for disposal of drilling mud and other wastes.

Today, these pits are lined with plastic to prevent pollution of the soil. Other pits are also excavated. One is used to deposit the small shale and rock cuttings brought up from the bottom of the drill hole. Another pit is used to prepare the mixture of clay, water, and chemicals called drilling mud that is circulated through the wellbore to cool the cutting bit and drill stem. A water well drilled on the site provides drilling fluid and also drinking and washing water for the work crew.

The drill hole is begun by digging a rectangular pit called a "cellar" and a shallow hole lined with conductor pipe in the middle of the cellar. The drilling rig is moved in and placed over the hole. Derrick rigs must be assembled on the site. The mast, or portable derrick, can be raised over the site as a unit.

Auxiliary structures and equipment are placed on the drill site, including mud pumps to circulate the drilling fluid, diesel engines for power, electric generators, storage racks and bins, and quarters for the drilling crew. If the well produces, storage tanks are needed for the hydrocarbons. When production is limited, trucks collect the stored hydrocarbons and transport them from the field. When production is great, buried pipelines called flow lines are connected to distant tank farms. In the oil field, flow lines are laid on low rails near the surface of the ground.

Before being piped into storage tanks, the oil, gas, and water that emerge from the well are processed in separators which sit on concrete pads. Salt water, or brine, is deposited in pits in order that it might evaporate.

After the drilling rig of a producing well is removed, the remaining wellhead, with numerous control valves, pressure gauges, and chokes, is called a "Christmas tree." Most of the drilling pad is usually removed. A portion of the pad surrounding the Christmas tree, measuring about 40

leet by 20 feet, is retained, as is the road to the wellhead.

If the hole that is drilled is dry, or if the well geases to produce, it is plugged with cement. Attempts are made, more or less thoroughly, to clear and level the drill site and to remove or bury wastes. Drill sites in the study area were not well-cleared and leveled, and they exhibit many features and much refuse of the oil operations.

As the forest closes over the drill sites, it is difficult to imagine the heavy equipment, towering derricks, huge metal tanks, and bustling activity that were once part of these locations. As described in the first chapter of this study, reforestation of the drill sites is taking place in ways that are dissimilar to the surrounding forest because the sites are man-altered. The drill sites listed below are shown on maps drafted for this study.

This apparent drill site is located near Bayou des Familles, 2450 feet northwest of the Shell Road. It consists of a clearing in the pecan orchard with some sapling growth. The clearing is edged by small levees and is approached by a 30-foot-wide access road which leads from Third Road. Brick fill is located in Third Road at the turn-off point of the access road. Aerial photographs show that the clearing, measuring about 50 feet wide by about 200 feet long, was made in the late 1960s. This was apparently not an oil production site.

This large drill site which has been mostly leveled is located at the southeast corner of the intersection of the Shell Road and the Old Barataria Public Road. The site appears to cover an area measuring about 400 feet square. Aerial photographs show that the first clearing in this area was made in the late 1960s, 330 feet from the intersection, along the 50-foot-wide right-of-way of the subdivision First Street for about 400 feet into a 200-foot-wide clearing. During the early 1970s, some of the forest between this clearing and the road juncture was partially cut-over and bulldozed. There is in this area a bulldozed earth mound about five feet high with felled tree limbs in and around it. Metal debris and chunks of baked drilling mud are scattered on the ground. When subjected to intense heat, the bentonite clay used as drilling mud becomes hard-baked as brick. Some five-gallon cans lying on the ground retain parts of their labels that read "Baroid Division, National Lead Company, Houston, For all water base . . . increasing drilling rate . . . improves bit performance . . . improves pumpability . . . reduces hole friction . . . reduces formation of solids. . . . " Numerous saplings grow in the area.

3. A drill site may have been located at the Ring Levee
Trail parking lot. Aerial photographs show that an

at this location by the mid-1960s. At 125 feet southeast of the parking lot is an L-shaped mound of earth about two feet high that appears to have been bulldozed into this position. Scattered in and around the mound are chunks of baked drilling mud, charred wood, clam and oyster shells, and a few pieces of metal and glass. About 50 feet to the north, northeast, and northwest of the parking lot is another linear rise in the ground about one or two feet high. These linear elevations may be the remains of a small ring levee. Scattered on the linear feature at the north wide of the parking lot are brick fragments; white ceramic and porcelain sherds; clam and oyster shells; and large, round, bent nails. As noted in previous chapters, cultural materials in this area may derive from an early twentieth century Negro squatter's cabin and from the dwelling of Spanish land grantee Louis Pelteau.

Also at this location is part of a rotting dragline skid constructed of squared timbers bound together with metal cables and tie-rods. Draglines, or excavating machines, are used to build drill pads and roads by scooping up soil from nearby borrow pits. Skids are used to help support the heavy weight of the dragline. Holes in the nearby swamp could be borrow pits, although they could also be tree-falls. When a tree falls, it uproots much soil with its roots and leaves a

hole in the ground which frequently remains long after the tree has rotted away. A small, round, leveed pit at the beginning of the Ring Levee Trail, on the west side of the trail, may be a test pit used to sample and burn off flow while a well was being drilled.

The first drill site on the Ring Levee Trail is located 4. 313 feet from the beginning of the trail. At this point, ring levees are located on both sides of the trail. On the left (western) side of the trail, the ring levee surrounds a drill pad that measures about 150 feet long by 75 feet wide and is elevated about five feet above the encircling water-filled pit. The drill pad is composed of earth and shells, and it is overgrown with young trees, saplings, and brush. The water in the pit is black, and the oily scum that floats on the surface indicates that the pit was used to test flow from the well, or that sediment from the bottom of a storage tank was dumped in the pit. After the drilling of the well and the removal of the drilling rig, one or more oil storage tanks would have been erected on the drill pad. The sediment that accumulates in the bottom of crude oil tanks is called "BS&W," or basic sediment and water. The sediment consists of black, asphaltic residue, and it is necessary to periodically clean tanks of BS&W.

Near the western side of the Ring Levee Trail, at 480 feet from the beginning of the trail, it is a four-foot-square concrete slab bearing a circular rust stain made by the base of a tank called a "separator." These are slender, vertical tanks containing mechanisms that separate the oil, gas, mud, and water that come from the well. Trash from the oil operations is strewn about the site. The U.S.G.S. "Bertandville, La." quadrangle map of 1966, photorevised in 1972 and 1979, shows that the drill hole is located about 400 feet from the beginning of the trail.

5. Continuing along the Ring Levee Trail, a series of ring levees can be seen on the left, or western, side of the trail. These were associated with the next drill hole which the quadrangle map shows to be located about 900 feet from the beginning of the trail. The ring levees of this site stretch for more than 500 feet, and the first of these is encountered at 600 feet from the beginning of the trail. At 630 feet is another concrete slab measuring about seven-and-a-half feet square. The ground is covered with shell. A storage tank was probably located here. Westward of the ring levee is a circular, water-filled pit having a diameter of about 75 feet and ringed with a little levee. This could have been a brine evaporation pit.

At 700 feet is a pond measuring about 200 feet wide and enclosed by a high ring levee. Rusted flow line pipes remain on this drill site. Aerial photographs show a linear clearing extending westward through the swamp for about 1000 feet beyond this drilling site. The photographs suggest that another drill hole may have been located at the end of the clearing. The remains of yet another ring levee are located at 1000 feet from the beginning of the trail.

Continuing along the Ring Levee Trail to the last drill \_ 6. site, the trail crosses at 1450 feet the pipeline laid in 1968 by the Estate of William G. Hellis and the Sea Drilling Corporation to transport hydrocarbons from a well located to the southeast to a trunk pipeline on the west side of Highway 45. Here, the pipeline and the Ring Levee Trail are deep in cypress swamp. Trees were felled in the 20-foot-wide pipeline right-of-way, giving it the appearance of a stream passing through the swamp. At the left side of the trail is a cathodic protection electrical conduit, about two-and-one-half feet high. A slight electrical current which ran through the small galvanized-iron pipe attached to a wooden board helped to control corrosion of the pipeline.

Aerial photographs show that the drill site at the end of the trail was abandoned soon after it was

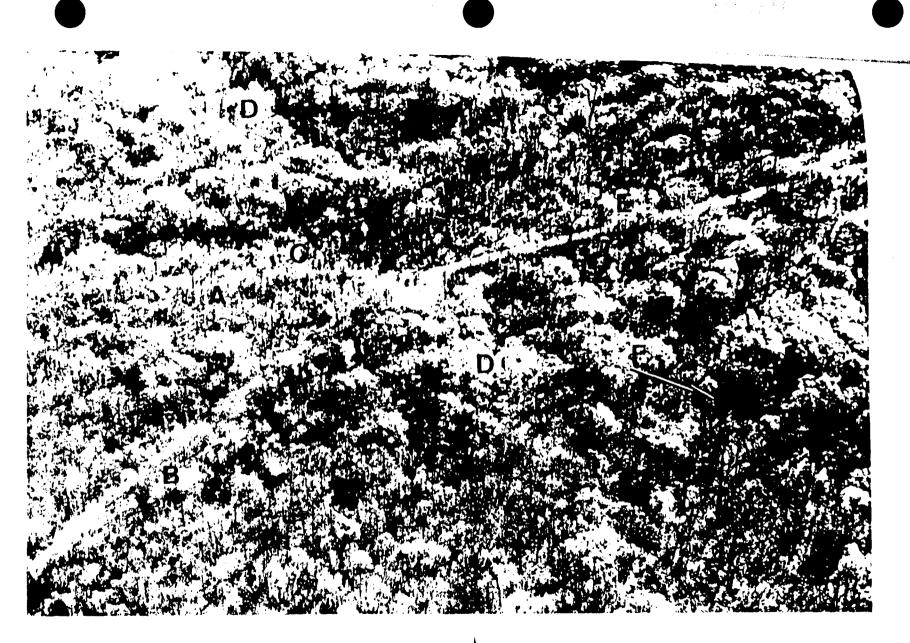
drilled in 1962. The park boardwalk trail circles the ring levee for a distance of more than 1000 feet. Some of the levee, drill pad, and road were probably taken up; the remaining raised areas are sinking beneath the water of the cypress swamp. However, the slightly elevated levees and drill pad support young red maples and tupelo gum. The drill pad is located in the center of the rink levee. Another levee divides a part of the ring levee to form a separate area which may have been used as the reserve pit for the disposal of drilling mud and other wastes.

Aerial photographs show that this drill site and the access road to it from the Shell Road were constructed in 1966. The well was so productive that a pipeline was laid in 1968 by the Hellis and Sea Drilling oil companies to carry the flow to a main trunk line. The center of the shell-covered drill pad is used as park maintenance area. The rest of the drill pad is overgrown with young trees. Several pits contain brine and hydrocarbon wastes. Spilled brine and other wastes have killed trees in an area north of the drill pad. Metal and wood debris from the oil operations remain on the site. In the early 1970s, a road was constructed from this drill site to another drill site 3500 feet to the northeast, outside of the park.

Aerial photographs show that this large drill site was constructed in 1966 and was abandoned and overgrown by the late 1960s. The ring levee of the site measures about 500 feet square. The levees have been partially broken down, but the remaining segments are nearly three feet high. A linear elevation, rising three or four feet in height, runs in a diagonal direction through the western part of the ring levee. This man-made linear elevation, which may have been part of the drill pad, is situated upon a natural ridge elevation which was followed by one of the courses of the Chemin de Barataria, or the Camino Real de Barataria.

Debris scattered about the site includes chunks of baked drilling mud, charred wood, pieces of concrete and metal, parts of a Bakelite toothed pump drive gear, and glass oil sample jars. Lettering on the jars identifies the drilling contractor as Schlumberger Well Services of New Orleans.

The ring levee is situated on the natural levee of the old river where the land is dry. The interior of the ring levee was put in cultivation soon after it was abandoned by the oil companies. The furrows and ditches and the ring levee are now growing over with saplings and young trees.



Infra-red oblique air view of crossroads at end of the Shell Road, looking SE. White trees are live oaks. 2/23/86. As Probable oil drill site No. 3. Bs Oil drill site No. 6 access road, The Ring Levee Trail. Cs Oil drill site No. 7 access road. Ds Old Barataria Public Road, The Big Woods Trail. Es Shell Road/Old Road/Christmas Plantation Headquarters Road. Fs Main ditch of the Christmas Plantation and a possible route of the Chemin de Barataria/Camino Real de Barataria. Gs Oil drill site No. 2.





## Left:

The Ring Levee Trail, built on an oil drill site access road, looking NE, 3/86.

# Right:

Boards, shell, and river sand of the oil road and possible drill pad later occupied by the Ring Levee Trail Parking Lot. 3/86.



Petroleum Engineer Gerald L. Schroeder, Jr. and his son, Erik, stand on drilling pad of drill site No. 4, which may also have been used to support an oil storage tank. Sump of ring levee in foreground and at left, looking NE. 4/86.



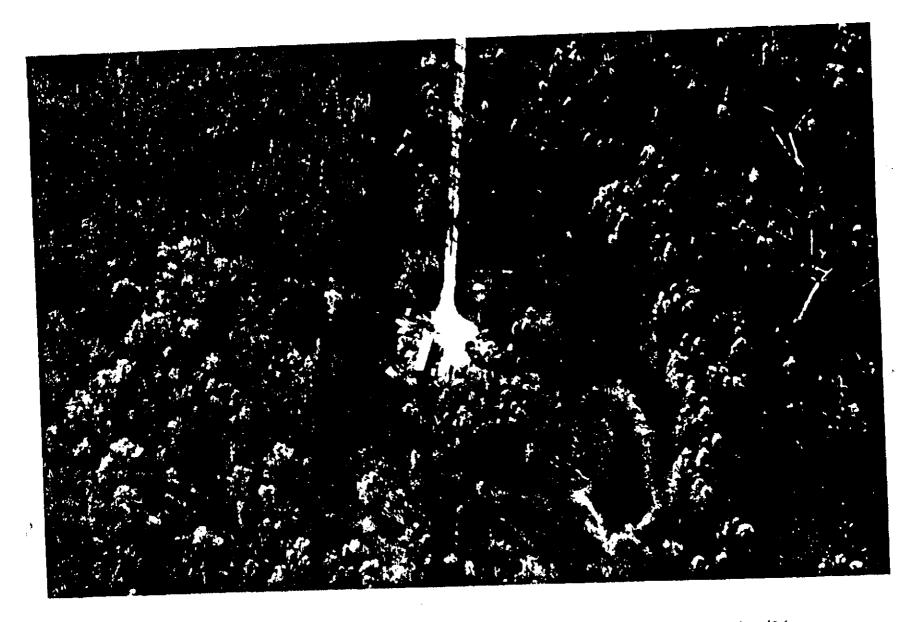
Leveed pit possibly associated with oil operations, located near oil drill site No. 8. 2/86.



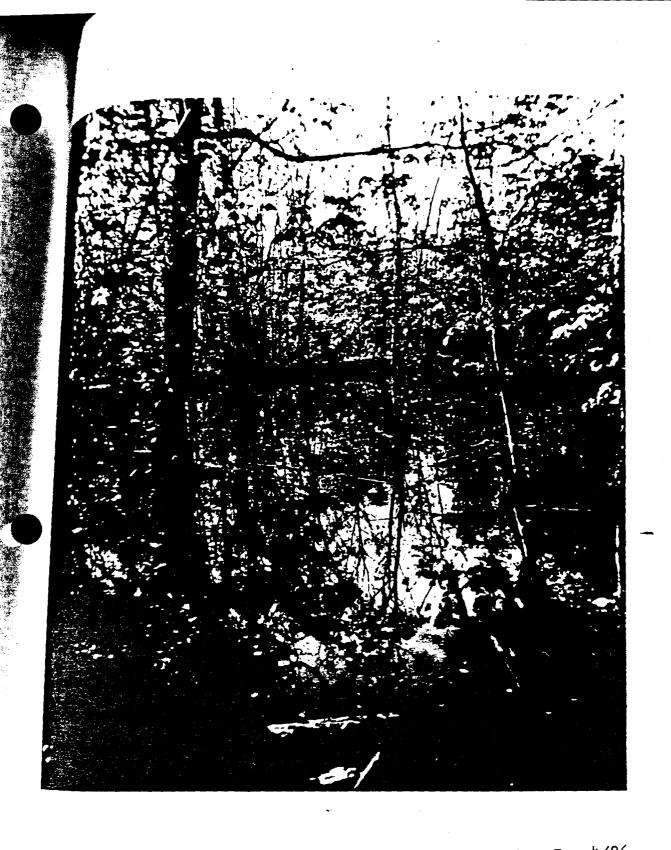
Ranger David Muth and Mike Comardelle walk the



Oblique air view of the Ring Levee Trail circling oil drill site No. 6, looking SSW. 2/23/86.



Oblique air view of oil drill site No. 7, looking W. 2/23/86.



Ponded ring levee of oil drill site No. 4, looking E. 4/86.



The Ring Levee Trail Parking Lot, possible oil drill site No. 3 drilling pad. View showing the Ring Levee Trail on an oil drill site access road at right, and trail to picnic area at left. 3/86.



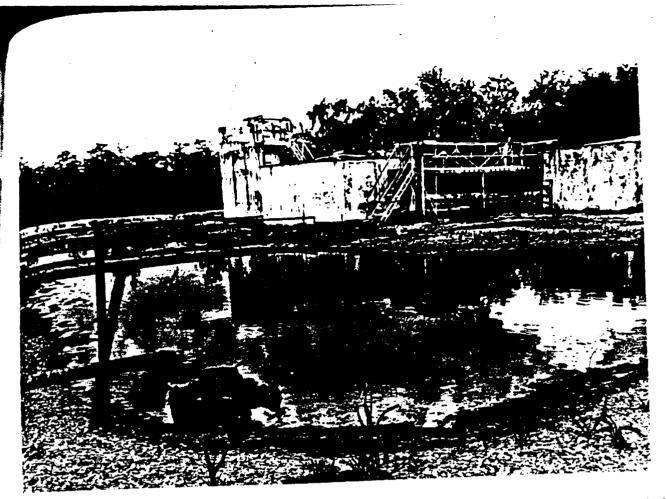
Bridge of the Shell Road/Old Road/Christmas Plantation Headquarters Food looking NE from west bank of Bayou des Familles. 3/86.



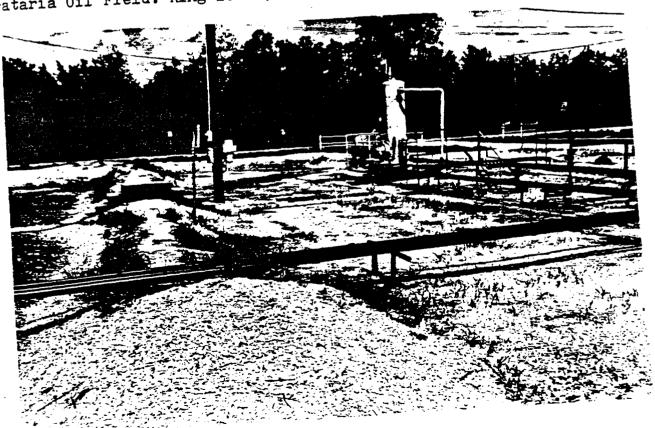
socess road to oil drill site No. 7, looking E from Ring Levee Farking Lot. 2/86.



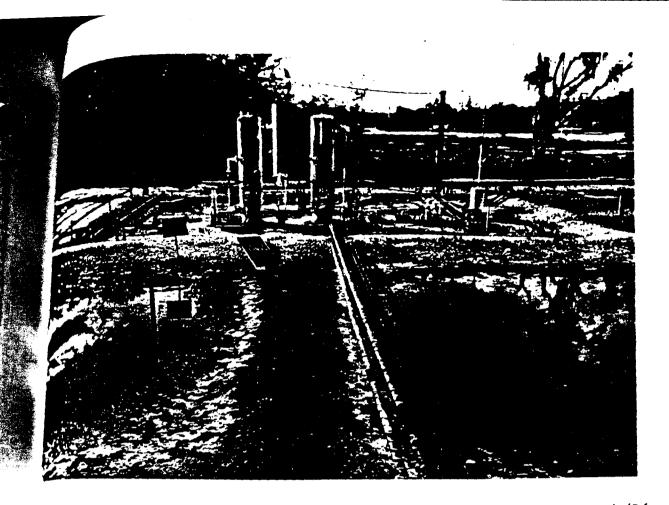
imps of baked bentonite clay used in oil drilling fluid, and a glass ample jar imprinted with the name of Schlumberger Company, from till site No. 8.



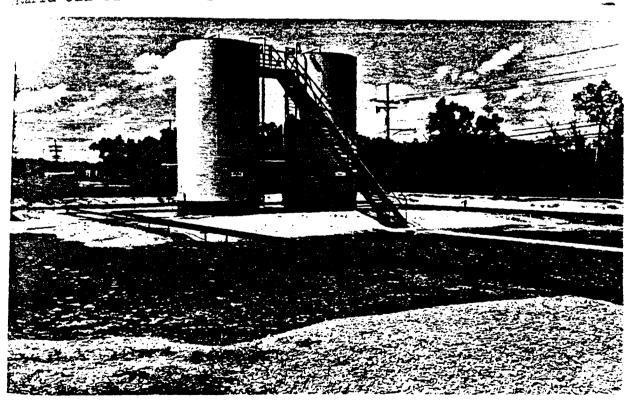
Barataria Oil Field. Ring levee, oil storage tanks, and walkways. 4/86.



Barataria Oil Field. Separator tank, flow lines, ring levees, concrete walkways, electricity pole. 4/86.



etaria Oil Field. Ring levees, separator tanks, flow lines. 4/86.



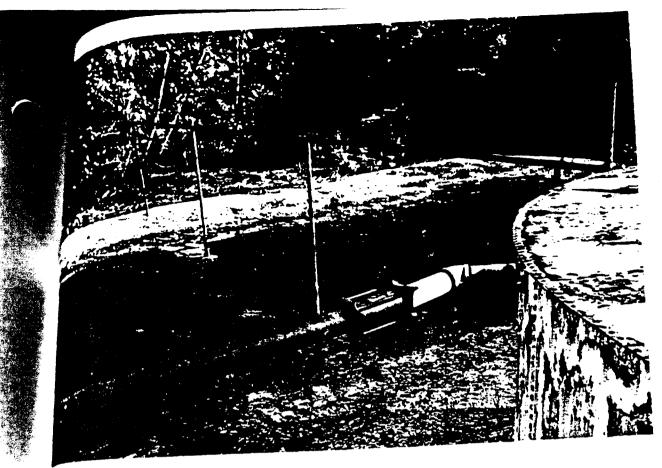
Parataria Oil Field. Oil storage tanks, ring levees, flow lines. 4/86.



Barataria Oil Field, showing ring levee constructed to contain spills, separator tanks, and flow lines. 4/86.



Barataria Oil Field, showing separator tanks on concrete pads and flow lines. 4/86.



gataria Oil Field. View from oil storage tank showing ring levee gas escape line. 4/86.



Barataria Oil Field. A Christmas tree, the control valves, pressure gages, and chokes assembled at the top of a well to control the flow of oil and gas after the well has been drilled and completed. 4/86.

#### ENDNOTES

#### THE CROWN POINT OIL FIELD

- 1. The brief background history of the oil industry in Jefferson Parish given in this chapter is derived from the following articles published in the Jefferson Parish Yearly Review, J. A. Shaw, "Lafitte Oil Field (Part One)" (1936), pp. 49-53; R. C. Stewart, "Lafitte Oil Field (Part Two)" (1936), pp. 53-57; R. C. Stewart, "Lafitte Oil Field" (1937), pp. 37-39; Edgar Allen Poe, "Lafitte Oil Field (Part One): The Record Breaking Oil Pool in Jefferson Parish" (1938), pp. 79-82; R. C. Stewart, "Lafitte Oil Field (Part Two): Activities of the Texas Co. at Lafitte" (1938) p. 83; Thomas Ewing Dabney, "The Rising Tide of Black Gold" (1940), pp. 12-26; H. B. Blanton, "Oil" (1944), pp. 138-46; David M. Kleck, "Oil is Ammo" (1951), pp. 32-38; "Decades of Industrial Destiny" (1952), pp. 24-53; Ray M. Thompson, "Oil The Biggest Little Word in the World" (1955), pp. 62-95; Harry X. Bay, "The Two Birthdays of Oil" (1959), pp. 53-59, pp. 206-13; and J. A. Shaw, "Louisiana Leads the World in Deep Drilling," Louisiana Conservation Review (Winter 1937-8) pp. 9-13, p. 59.
- 2. G. O. Coignet, "Oil and Gas Map of Louisiana," compiled by the Louisiana Geological Survey, published by the Department of Conservation, October 1947, Map Collection, University of New Orleans.
- 3. Locations and names of oil fields are given on maps of "Jefferson Parish, Louisiana," prepared by the Highway Department, 1958-61, and 1978-81, Map Collection, University of New Orleans.
- 4. Oil exploration lease, Robert J. Perkins to Kelly Land Company of Houston, Texas, June 28, 1928, C.O.B. 103, folio 525, JPCH; Thomas Ewing Dabney, "The Rising Tide of Black Gold," <u>Jefferson Parish Yearly Review</u> (1940), p. 14; Ron Baker, <u>A Primer of Oilwell Drilling</u>, 4th ed. (Austin: University of Texas at Austin, 1979), p. 16.
- 5. Descriptions of features in the study area associated with oil exploration are derived from those of Petroleum Engineer Gerald L. Schroeder, Jr., Principal Engineer of Boeing Petroleum Services, Inc. of Metairie, who volunteered to tour the study area and explain the original functions of remnants of oil activity for the purpose of this study.
- 6. Mineral lease, Edna Seymour, wife of Peter Walsh, to Anderson-Pritchard Oil Company, October 5, 1956, MLB 16, folio 593, JPCH.

- 7. Mineral lease, Ferdinand H. Dietze and Mrs. Charlotte Amy Dietze De Limon to Pan American Petroleum Corporation, September 12, 1960, MLB 20, folio 669, JPCH; Mineral leases by the Pan American Petroleum Corporation for Squares 28, 33, 38, 43, 58, 63, 68, 29, 47, 54, and 44 are located in MLB 22, f. 310, f. 344, f. 271, f. 343, f. 389, and f. 253, JPCH.
- 8. Baker, A Primer of Oilwell Drilling, p. 11, p. 84, p. 94; Amendment to lease between F. H. Dietze and Mrs. C. A. Dietze De Limon and Pan American Petroleum Corporation, of September 12, 1960, dated September 18, 1963, MLB 23, folio 999, JPCH.
- 9. Baker, A Primer of Oilwell Drilling, p. 11, p. 83, p. 85; the Southern Crude Oil mineral leases are located in MLB 25, f. 268, f. 269, f. 270, f. 253, f. 310, and f. 515, JPCH; the Pelto Oil Company leases from Southdown Lands, Inc. are located in MLB 29, f. 551, and MLB 30, f. 400, JPCH.
- 10. Mineral lease, Ferdinand H. Dietze and Amy Dietze De Limon, wife of Louis H. De Limon, to T. Harry Kaplyn, September 23, 1964, MLB 24, f. 964, JPCH; Agreement between Sea Drilling Corporation and the Estate of William G. Hellis, October 20, 1966, MLB 26, f. 553, JPCH; Right—of—way agreement between F. H. Dietze and A. Dietze De Limon and the Estate of W. G. Hellis and Sea Drilling Corp., March 22, 1968, MLB 27, f. 330, JPCH; Right—of—way agreement between Canal Assets, Inc., and the Estate of W. G. Hellis and Sea Drilling Corp., March 29, 1968, MLB 27, f. 328, JPCH.
- 11. Mineral leases, F. H. Dietze and A. Dietze De Limon to J. A. Seglund, Inc., and P. J. Klentos, October 20, 1970, and June 17, 1971, MLB 29, f. 311 and f. 564, JPCH.
- 12. Information contained in the following descriptions of parts of the study area affected by oil operations was obtained from the following aerial photographs housed in the New Orleans District of the U.S. Corps of Engineers: Roll No. 9-61, Photos 196-201, Book 31, Vicksburg District, November 9, 1961; Roll No. X-2, Photos 267-269, October 24, 1965; Roll No. X-3, Photos 190-201, Book 35, Memphis District, November 4, 1966; Roll No. 55, Photos 180-185 and 201-206, October 17, 1969; Roll 71-44, Photos 46-47, August 7, 1972.

#### BIBLIOGRAPHY

### Archival Collections

Archives Nationales, Paris.
Archives Coloniales.

Archivo General de Indies, Seville. Papeles de Cuba. Papeles de Santo Domingo.

Bureau of Land Management, Eastern States Office, Reston, Virginia.

Cadastral survey records and maps of the United States Surveyor General's Office.

Historic New Orleans Collection.

Dauberville-Bouligny Papers.

Map Collection.

Louisiana Land Records, 1787-1827.

Jefferson Parish Old Judicial Records, Gretna.

Jefferson Parish Courthouse, Gretna.
Notaries Records.
Conveyance Office Books.
Mortgage Office Books.
Maps.

Louisiana State Land Office, Baton Rouge.

Cadastral survey records and maps of the United States

Surveyor General's Office.

Louisiana State Museum Historical Center, New Orleans.
French Superior Council Records.
Spanish Judicial Records of Louisiana.
Works Progress Administration, Translation of the
Records of the Superior Council Proceedings (Black Books).
Mavis Grove Plantation Journal.

Louisiana State University, Baton Rouge.
Hill Memorial Library, Special Collections.
Map Collection.

National Archives, Washington, D.C.
Record Group 49, Bureau of Land Management, Louisiana
Private Land Claim Files.
Record Group 77, Chief of Engineers, Cartographic
Files.

National Park Service, Southwest Regional Office, Land Acquisition Office, Santa Fe, New Mexico. Land title records and maps.

New Orleans Notarial Archives.
Notaries Records.
Plan Books.

New Orleans Public Library, Louisiana Division.
Louisiana Court of Probate, Orleans Parish, Succession
and Probate Records: 1805-1848.
Map Collection.

Newberry Library, Chicago.
Aver Collection.

Tulane University Library, New Orleans.

Louisiana Collection.

Map Collection. Vertical File.

Special Collections Division.

French Concession Papers. John McDonogh Collection.

The Rosemonde E. and Emile Kuntz Collection.
Samuel Henry Lockett. "Louisiana as it Is: a

Geographical and Topographical Description of the State . . . " 1873. Unpublished manuscript.

Works Progress Administration. Survey of Federal Archives in Louisiana. Typescript, 1937-38. Jean-Baptiste Le Moyne Bienville, Sieur de. "The Indians of Louisiana and the Trading that can be done with them."

Works Progress Administration. Survey of Federal Archives in Louisiana. "Despatches of the Spanish Governors of Louisiana, 1766-1792." Typed translations, 1937-38.

University of New Orleans Library.

Archives and Manuscripts/Special Collections Department.

Louisiana Supreme Court Collection of Legal Archives,

Eastern District, New Orleans, Acct. 106.

Map Collection.

# 2. <u>Unpublished Reports</u>, Theses, and Papers

- Beavers, Richard C. "Archeological Site Inventory, Barataria Basin Marsh Unit, Core Area Jean Lafitte National Historical Park, Jefferson Parish, Louisiana." Photocopy, Archeological Research Program, University of New Orleans, 1982.
- Bonck, Juanda Clair. "Plant Succession on Abandoned Farmland in the Vicinity of New Orleans, Louisiana." Unpublished Master of Science Thesis, Tulane University, New Orleans, April, 1942.
- Cummins, Gary. "Archaeological Overview of the Lower Mississippi Delta, Southern Louisiana." Denver Service Center, National Park Service, 1980.
- Davis, Dave D., and Marco J. Giardino. "Evaluation of Archaeological Collections from the Mississippi River Delta Region." Tulane University, Department of Anthropology, prepared for the Jean Lafitte National Historical Park, April, 1981.
- DeMarcay, Gary B. Paper on Troyville Period excavations on Isle Bonne, presented to the 1982 Louisiana Archaeological Society meeting, Thibodaux, Louisiana. Texas A & M University, Department of Anthropology, College Station, Texas.
- Din, Gilbert C. "A History of the Islenos in Southern Louisiana to 1945." Typescript deposited with the Jean Lafitte National Historical Park. 1985.
- Dowling, Thomas Frank. "Vascular Plants of the Jean Lafitte National Historical Park." Unpublished Bachelor of Science Thesis, Tulane University, New Orleans, May, 1981.
- Drechsel, Emanuel J., and T. Haunani Makuakane-Drechsel.
  "An Ethnohistory of 19th Century Louisiana Indians."
  Department of Anthropology, University of Oklahoma,
  Norman, Oklahoma. Report prepared for the National
  Park Service, May, 1982.

- Duhe, Brian J. "A Study of Prehistoric Coles Creek Plaquemine Cultural and Technological Adaptations in the Upper Barataria Basin." Paper presented at the 37th Annual Southeastern Archaeological Conference, New Orleans. Louisiana, November 14, 1980.
- Ehret, Frank, Jr. "My Childhood Association with the Roads in the Brown Plantation and Surrounding Areas, Now the Barataria Unit of the Jean Lafitte National Historical Park." Unpublished manuscript in the possession of the author, 1986.
- Ehret, Mary C. "The Jean Lafitte National Historical Park: Preserving Culture, History, Ethnicity and Wetlands of the Mississippi River Delta Region." Photocopy, paper prepared for Urban Studies 4400, University of New Orleans, 1983.
- Gagliano, Sherwood M., Richard A. Weinstein, Eileen K.
  Burden, Kathleen L. Brooks, and Wayne P. Glander
  (Coastal Environment Inc.). "Cultural Resources
  Survey of the Barataria, Segnette, and Rigaud Waterways, Jefferson Parish, Louisiana." Report prepared
  for New Orleans District, U. S. Army Corps of Engineers, January, 1979.
- Giardino, Marco. "Overview of the Archaeology of the Coquilles Site. Barataria Unit, Jean Lafitte National Historical Park, Louisiana." Unpublished report submitted to National Park Service, Southwest Regional Office, n.d.
- "Report on the Ceramic Materials from the Coquille Site (16JF:57), Barataria Unit, Jean Lafitte National Historical Park." Photocopy, Jean Lafitte National Historical Park, New Orleans, 1984.
- Goodwin, R. Christopher, John Stewart Speaker, Joanna Chase, Carol Poplin, and Herschel Franks. "Archeological Assessment of the Barataria Unit, Jean Lafitte National Historical Park." Unpublished report submitted to the National Park Service, Southwest Region, U. S. Department of Interior, Santa Fe, New Mexico, 1986.
- Goodwin, R. Christopher, and Associates, Inc. "Level II Archeological Survey, Big Woods Development Area, Environmental Educational Center-Phase I, Barataria Unit, Jean Lafitte National Historical Park, Jefferson Parish, Louisiana." Draft Report prepared for the National Park Service, Southwest Region, Santa Fe, August 6, 1987.

- Louisiana Department of Natural Resources, Office of Conservation. "Amendment to Statewide Order No. 29B concerning the storage, treatment, and disposal of nonhazardous oilfield waste...," January 20, 1986, Photocopy.
- Loumiet, Betty D. "Preliminary Report on Bayou Des Familles."
  Paper on file at University of New Orleans Anthropology
  Department, 1977.
- Mancil, Ervin. "An Historical Geography of Industrial Cypress Lumbering in Louisiana." Unpublished Ph.D. Dissertation, Louisiana State University, 1972.
- Pujol, Irene Blanche. "Robin's Voyages Dans L'Interlude De La Louisiane, Translated and Annotated." Unpublished Master of Arts Thesis, Louisiana State University, 1935.
- Ramp, Paul. "The Life History of the Palmetto." Unfinished Master of Science Thesis, Tulane University, New Orleans.
- Shenkel, J. Richard. "Proposed Jean Lafitte Park, Archaeological Summary." Paper read at the Senate Committee on Interior and Insular Affairs. Gretna, Louisiana, 1976.
- Springer, Jaures W. "The Prehistoric & Cultural Geography of Coastal Louisiana." Unpublished Ph.D. Dissertation, Yale University, 1973.
- Waggoner, Gary S., and Nancy K. Thorwardson. "Computerized Data Base Built for Vascular Flora of NP System."

  Photocopy at the Jean Lafitte National Historical Park, 1986.
- 3. <u>Interviews 1985-1987</u>
- Mr. Frank Ehret, Jr., Marrero, Louisiana.
- Mr. Louis V. Ehret, Gretna, Louisiana.
- Mrs. Mary Dauenhauer Erlinger, Gretna, Louisiana.
- Mr. Benjamin Gerow, Chief of Maintenance, Barataria Unit, Jean Lafitte National Historical Park.
- Dr. Charles Odom, Metairie, Louisiana.
- Mr. Percy Prestenbach, Jr., Marrero, Louisiana.

- Mr. Percy Prestenbach, Sr., Crown Point, Louisiana.
- Mr. Gerald L. Schroeder, Jr., Petroleum Engineer, Principal Engineer for Boeing Petroleum Services, Inc., Metairie, Louisiana.
- Mr. A. J. Smith, Chalmette, Louisiana.
- Mr. Tommy Wildey, Marrero, Louisiana.
- 4. Government Publications
- American State Papers. Documents, Legislative and Executive, of the Congress of the United States. Washington, D.C.: Gales and Seaton, 1832 and 1834.
- American State Papers. Public Lands. Washington, D.C.: 3832-61.
- Brown, Clair A. <u>Louisiana Trees and Shrubs</u>. Louisiana Forestry Commission Bulletin No. 1. Baton Rouge: August, 1945.
- . "The Vegetation of the Indian Mounds, Middens, and Marshes in Plaquemines and St. Bernard Parishes." The Lower Mississippi River Delta. Louisiana Geological Survey, Geological Bulletin No. 8, State of Louisiana Department of Conservation. New Orleans: November 1, 1936, pp. 423-39.
- Carter, Clarence Edwin. The Territorial Papers of the United States. Vol. 9 (1805). Washington, D.C.: U. S. Government Printing Office, 1951.
- Dormon, Caroline. <u>Forest Trees of Louisiana and How To Know Them</u>. Louisiana Department of Conservation, Bulletin No. 15. New Orleans: 1927.
- Ferguson, Brigadier General H. B. <u>History of the Improvements of the Lower Mississippi River for Flood Control and Navigation, 1932-1939</u>. Washington, D.C.: United States Army Corps of Engineers and United States Mississippi River Commission, 1940.

- Foster. J. H. <u>Forest Conditions in Louisiana</u>. U. S. Department of Agriculture, Forest Service Bulletin No. 114. Washington, D.C.: Government Printing Office, 1912.
- Harris, Gilbert D., and A. C. Veatch. Geological Survey of Louisiana, Report for 1899. Part V. Geology and Agriculture, A Preliminary Report on the Geology of Louisiana. Baton Rouge: State Experiment Station, 1899.
- Harris, William H. Louisiana Products, Resources and Attractions. New Orleans: State Immigration Office, E. A. Brandao & Co. Printers, 1888.
- With a Sketch of the Parishes: A Handbook of Reliable Information Concerning the State. New Orleans: Times-Democrat Print, 1881.
- Holmes, Barbara. Historic Resources Study; The Barataria

  <u>Unit of Jean Lafitte National Historical Park.</u> Southwest Cultural Resources Center, Professional Papers
  No. 5. Santa Fe: Division of History, Southwest Region,
  National Park Service, Department of the Interior, 1986.
- Jefferson Parish Police Jury. Rules Concerning the Construction of Fences, the Police of Animals, and Other Objects of Police in the Parish of Jefferson. New Orleans:

  John Gibson, printer, 1831.
- Kinnard, Lawrence, ed. Spain in the Mississippi Valley, 1765-1794. Vol. 2, part 1. Washington, D.C.: Government Printing Office, 1946.
- Louisiana Cooperative Extension Service. Agriculture, Key to Louisiana's Progress. Baton Rouge: Louisiana County Agricultural Agents Association of the Louisiana Cooperative Extension Service, August, 1984.
- Martin, Francois-Xavier. Louisiana term reports; or cases argued and determined in the Supreme Court of that state. New Orleans: various printers, 1820-26.

- Newman, Robert W., and Nancy W. Hawkins. Louisiana Prehistory. Louisiana Archaeological Survey and Antiquities Commission, Anthropological Study No. 6. Baton Rouge: Department of Culture, Recreation and Tourism, 1982.
- Putnam, J. A., and Henry Bull. The Trees of the Bottomlands of the Mississippi River Delta Region. Southern Forest Experiment Station, Professional Paper No. 27. New Orleans: April, 1932.
- Robinson, Merritt M. Reports of Cases Argued and Determined in the Supreme Court of Louisiana, 12 vols. New Orleans: E. Johns & Co., 1842-1846.
- Russell, Richard J., Henry V. Howe, James H. McGuirt,
  Christian F. Dohm, Wade Hadley, Jr., Fred B. Kniffen,
  and Clair A. Brown. Lower Mississippi River Delta.
  Louisiana Geological Survey, Geological Bulletin No. 5,
  State of Louisiana, Department of Conservation. New
  Orleans: August 1, 1935.
- St. Amant, Lyle S. Louisiana Wildlife Inventory and Management Plan. Baton Rouge: Louisiana Wildlife and Fisheries Commission, 1959.
- Stubbs, William C. Of Louisiana, Giving Geographical and Agricultural Features together with Crops that Can Be Grown, Description of Each Parish, Climate, Health, Education, Fish and Oysters, Railroads, and Water-courses. Compiled and written for the State Immigration Association. New Orleans: Printed by New Orleans Picayune, 1895.
- Rice . Preparation, Cultivation, Flooding, Harvesting, and Noxious Weeds in the Rice Fields. Bulletin of the Agricultural Experimental Station of the Louisiana State University, and A. & M. College, Second Series, No. 61. Baton Rouge: Board of Agriculture and Immigration, 1900; and No. 77, printed 1904.
- Sugar Cane. A Treatise on the History, Botany, and Agriculture of Sugar Cane, and the Chemistry and Manufacture of Its Juices into Sugar and Other Products.

  Vol. 1. Baton Rouge: Bureau of Agriculture and Immigration, 1897.

- Swanton, John R. Indian Tribes of the Lower Mississippi Valley and Adjacent Coast of the Gulf of Mexico.

  Smithsonian Institute Bureau of American Ethnology Bulletin No. 43. Washington, D.C.: Government Printing Office, 1911.
- United States Department of Agriculture; Soil Conservation Service. <u>Soil Survey of Jefferson Parish, Louisiana</u>. January, 1983.
- United States Department of the Interior, National Park Service. <u>Draft Land Protection Plan</u>, <u>Jean Lafitte</u> National <u>Historical Park</u>, <u>Louisiana</u>. <u>March</u>, 1984.
- United States House of Representatives. 18th Congress. 1st
  Session. H. Doc. 103. Message from the President of
  the United States transmitting the information required
  by a resolution of the House of Representatives of the
  9th ultimo, in relation to the Report of the Register
  of the Land Office in the Eastern District of Louisiana.
  March 4, 1824. Washington, D.C.: Gales and Seaton,
  1824.
- Treasury Department. Land Claims in Louisiana. No. 37, "Notice of Claim of the Heirs of Bernard Dauterive." December 17, 1842.
- Heirs of J. E. Bouligny. January 7, 1881. Copy in Louisiana Collection, Tulane University Library.
- United States Senate. 25th Congress. 2nd Session. Document No. 196. Report from the Secretary of the Treasury. "Memorial accompanying the claim of the heirs of J. A. B. Dauterive," pp. 20-28. February 14, 1838.
- Williams, Stephen K., ed. Reports of Cases Argued and Decided in the Supreme Court of the United States, Book XIII. Newark, N.Y.: The Lawyers' Co-operative Publishing Company, 1883, 10 Howard, 608-27, "The United States v. Jean-Baptiste D'Auterive et al."

- Wilson, Harry D., and W. E. Anderson. <u>Pointed Paragraphs</u>
  on <u>Pecans</u>. Baton Rouge: Louisiana <u>Department of</u>
  Agriculture and Immigration, ca. 1930's.
- Works Progress Administration, The Historical Records Survey,
  Division of Professional and Service Projects. Transcriptions of Parish Records of Louisiana. No. 26.

  Jefferson Parish (Gretna), Series I, Police Jury Minutes.
  3 vols. New Orleans: June, 1939.

## 5. Books and Pamphlets

- Adams, Charles Kendall, ed. <u>Johnson's Universal Cyclopaedia</u>. 8 vols. New York: D. Appleton & Co., and A. J. Johnson Co., 1895.
- Adams, R. D., B. B. Barrett, J. H. Blackman, B. W. Gane, and W. G. McIntire. Barataria Basin: Geologic Processes and Framework. Baton Rouge: Louisiana State University Center for Wetland Resources, 1976.
- Ainsworth, Fern. Private Land Claims, Louisiana. Natchitoches, Louisiana: Privately printed, n.d.
- Allan, William. <u>Life and Work of John McDonogh</u>. McDonogh, Maryland: The Trustees of the McDonogh School, 1886. Reprint. Metairie, Louisiana: Jefferson Parish Historical Commission, 1983.
- Allen, Charles M. Grasses of Louisiana. Lafayette: University of Southwestern Louisiana, ca. 1980.
- American Petroleum Institute. <u>Facts About Oil</u>. Dallas, Texas: American Petroleum Institute, n.d.
- Primer of Oil and Gas Production. Dallas, Texas:
  American Petroleum Institute, n.d.
- Arthur, Stanley Clisby. <u>Jean Lafitte, Gentleman Rover</u>. New Orleans: Harmanson, 1952.
- Austin, James G. A Practical Treatise on the Preparation,
  Combination and Application of Calcareous and Hydraulic
  Limes and Cements. London: Trübner & Co., 1862.

- Bahr, L. J., and J. J. Hebrard. <u>Barataria Basin: Biological Characterization</u>. Baton Rouge: Louisiana State University Center for Wetland Resources, 1976.
- Bahr, Leonard M., Jr., Robert Costanza, John W. Day, Jr., Suzanne E. Bayley, Christopher Neill, Scott G. Leibowitz, and Jean Fruci. Ecological Characterization of the Mississippi Deltaic Plain Region: A Narrative with Management Recommendations. Baton Rouge: Louisiana State University, Coastal Ecology Laboratory, Center for Wetland Resources, September, 1983.
- Baker, Ron. A Primer of Oilwell Drilling. 4th ed. Austin: University of Texas at Austin, 1979.
- Barron, Bill. <u>The Vaudreuil Papers</u>. 1st ed. New Orleans: Polyanthos, 1975.
- Bell, William C., comp. Roberts and Company Illustrated
  Catalogue of Mouldings, Architectural and Ornamental
  Woodwork. New Orleans: New Orleans Lithography &
  Engraving Co., 1880.
- Bescherelle, M., Sr. <u>Dictionaire Nationale ou Dictionaire</u>
  <u>Universal de la Langue Française</u>. 15th ed. Paris:
  Garnier Frères, Libraires-Editeurs, 1873.
- Bezou, Henry C. <u>Metairie: A Tongue of Land to Pasture</u>. Gretna: Pelican Publishing Company, 1973.
- , ed. Random Readings The Jefferson Parish
  Yearly Review. Published under the auspices of the
  Jefferson Parish Historical Commission. Jefferson
  Parish, Louisiana, 1985.
- Bouchereau, L. Statement of the Sugar and Rice Crops Made in Louisiana. New Orleans: Young, Bright & Co., 1869-1904.
- Bourquard, Shirley Chaisson. <u>Early Settlers on the Delta</u>. (In press.)
- Bouvain, Francis, ed. Louisiana Almanac for 1867. New Orleans: Francis Bouvain, Publisher, 1867.

- Brasseaux, Carl A. A Comparative View of French Louisiana.

  1699 and 1762: The Journals of Pierre Le Moyne d'Iberville and Jean-Jacques-Blaise d'Abbadie. The USL
  History Series No. 13. Lafayette, Louisiana: University of Southwestern Louisiana, 1979.
- Brewster, David, ed. <u>The Edinburgh Encyclopaedia</u>. First American Edition. <u>Philadelphia</u>: Published by Joseph Parker, Printed by William Brown, 1832.
- Brown, Clair A. Commercial Trees of Louisiana. Baton Rouge: Louisiana Forestry Commission, 1956.
- Baton Rouge: Louisiana State University Press, 1972.
- Bulliard, Jane Guillory, Winston De Ville, and Leona
  Trosclair David, trans. and eds. Marriage Contracts
  of the Attakapas Post, 1760-1803, Colonial Louisiana
  Marriage Contracts, Vol. V and 1774 Census of Attakapas Post. St. Martinville, Louisiana: Attakapas
  Historical Association, 1966.
- Butler, W. E. Down Among the Sugar Cane, The Story of Louisiana Sugar Plantations and Their Railroads. Baton Rouge: Morgan Publishing Co., 1980.
- Caughey, John Walton. <u>Bernardo Gálvez in Louisiana, 1776-1783</u>. Berkeley: University of California Press, 1934.
- Champomier, P. A. Statement of the Sugar Crop Made in Louisiana. New Orleans: Magne & Weisse, 1844 through 1862, excepting Cook & Young Company, 1858-59.
- Charlevoix, Pierre F. X. de. <u>Charlevoix's Louisiana</u>, <u>Selections from the History and the Journal</u>. Charles <u>E. O'Neill</u>, ed. Baton Rouge: Louisiana State University Press, 1977.
- Christovich, Mary Louise, Roulhac Toledano, Betsy Swanson,
  Pat Holden, Samuel Wilson, Jr., and Bernard Lemann.
  New Orleans Architecture: Vol. II, The American Sector.
  Gretna, Louisiana: Pelican Publishing Company, 1972.

- Christovich, Mary Louise, Sally Kittredge Evans, and Roulhac Toledano. New Orleans Architecture, Vol. V: The Esplanade Ridge. Gretna, Louisiana: Pelican Publishing Company, 1977.
- Clark, John C. New Orleans 1718-1812: An Economic History. Baton Rouge: Louisiana State University Press, 1970.
- Cline, Isaac Monroe. Floods in the Lower Mississippi Valley.
  New Orleans: New Orleans Board of Trade, 1927.
- Cohen, H., and A. Cohen. <u>New Orleans Directory</u>. New Orleans: Daily Delta, 1853 and 1855.
- Coleman, James Julian, Jr. Gilbert Antoine de St. Maxent,

  The Spanish-Frenchman of New Orleans. Gretna, Louisiana: Pelican Publishing Co., 1968.
- Coleman, James M. <u>Deltas: Processes of Deposition and Models</u>
  for Exploration. Champaign, Illinois: Continuing Education Publication Co., Inc., 1976.
- Collingwood, G. H., and Warren D. Brush. Knowing Your Trees.
  Revised and edited by Devereux Butcher. Washington,
  D.C.: The American Forestry Association, 1964.
- Costanza, Robert, Christopher Neill, Scott G. Leibowitz, Jean R. Fruci, Leonard M. Bahr, Jr., and John W. Day, Jr.

  Ecological Models of the Mississippi Deltaic Plain

  Region: Data Collection and Preservation. Baton Rouge:

  Louisiana State University Center for Wetland Resources,
  1983.
- Cox, John A., Ralph S. Woodward, and Arthur O. Alben. Pecan Production in Louisiana. Extension Publication 1057, formerly Cir. 269. Baton Rouge: Extension Division, Louisiana State University, October, 1947, reprinted July, 1950.
- Cutler, R. King. <u>Address</u>. New Orleans: Rea's Steam Job Printing Office, August, 1865. Copy in Louisiana Collection, Tulane University Library.

- Debien, Gabriel. <u>Une Plantation de Saint-Dominque, La Sucrerie Galbaud du Fort (1690-1802)</u>. Notes d'Histoire Coloniale I. Caire: Les Presses de l'Institut Français d'Archéologie Orientale du Caire, 1941.
- De la Peña y Cámara, José, Ernest J. Burrus, Charles Edwards
  O'Neill, and Maria Teresa Garcia Fernandez, eds. Catalogo
  de Documentos del Archivo General de Indias: Section V,
  Gobierno, Audiencia de Santo Domingo, Sobre la Epoca
  Espanola de Luisiana. 2 vols. Madrid: Direccion General
  de Archivos y Bibliotecas; New Orleans: Loyola University,
  1968.
- Dibble, Ernest F., and Earle W. Newton, eds. Spain and Her Rivals on the Gulf Coast. Pensacola, Florida: Historic Pensacola Preservation Board, 1971.
- Diderot, Denis. <u>Diderot Encyclopedia</u>, The Complete Illustrations, 1762-1777. 6 vols. New York: Harry N. Abrams, Pub., 1978.
- Encyclopedia of Trades and Industry. 3 vols. New York:

  Dover Publishing Co., Inc., 1959.
- <u>des Arts, et des Métiers, 1751-1780</u>. Reprint. Stuttgart: Friedrich Fonimann Verlag, 1961.
- ences, des Arts et des Métiers, par une Société de Gens de Lettres. Nouvelle Edition. Genève: Chez Pellet, Imprimeur-Libraire, 1777.
- Din, Gilbert C., trans. and ed. <u>Louisiana in 1776: A Memoria of Francisco Bouligny</u>. New Orleans: Louisiana Collection Series of Books and Documents on Colonial Louisiana, 1977.
- Diocese of Baton Rouge Catholic Church Records. Vol. 2 (1770-1803). Baton Rouge: Diocese of Baton Rouge, Department of Archives, 1980.
- Earle, F. S. Southern Agriculture. New York: The Macmillan Company, 1908.

- The English Encyclopaedia. London: Printed by T. Davison for G. Kearsley, 1802.
- Evans, Sally Kittredge, Frederick Stielow, and Betsy Swanson.

  Grand Isle on the Gulf: An Early History. Metairie,
  Louisiana: Jefferson Parish Historical Commission, 1979.
- Ewel, Kathleen Carter and Howard T. Odum, eds. <u>Cypress</u>
  <u>Swamps</u>. Gainesville: University Presses of Florida,
  <u>University</u> of Florida Press, 1984.
- Ferris, George T., ed. Our Native Land: Or Glances at American Scenery and Places. New York: D. Appleton & Co., 1886.
- Forsyth, Alice Daly, and Ghislaine Pleasonton. Louisiana Marriage Contracts. New Orleans: Polyanthos, 1980.
- Fortier, Alcée. <u>History of Louisiana</u>. 4 vols. Paris: Goupil and Co.; New York: Manzi, Joyant and Co., 1904.
- . Louisiana. 3 vols. Chicago: Century Historical Association, 1914.
- Foster, J. W. <u>Prehistoric Races of the United States of America</u>, 3rd ed. Chicago: S. C. Griggs & Co., 1874.
- French, B. F. Historical Collections of Louisiana and Florida, Including Translations of Original Manuscripts Relating to Their Discovery and Settlement, with Numerous Historical and Biographical Notes. Second Series: Historical Memoirs and Narratives 1527-1702. New York: Albert Mason, 1875.
- Friedkin, J. F. "A Laboratory Study of the Meandering of Alluvial Rivers." In Benchmark Papers in Geology: River Morphology. Edited by Stanley A. Schumm. Stroudsburg, Pennsylvania: Dowden, Hutchinson, and Ross, Inc., 1972.
- Gagliano, Sherwood, William G. Haag, Clarence H. Webb, and Fred B. Kniffen. Louisiana Indians, 12,000 Years. New Orleans: Friends of the Cabildo, Louisiana State Museum, 1966.

- Gillmore, Q. A. Practical Treatise on Limes, Hydraulic Cements, and Mortars: Containing Reports of Numerous Experiments Conducted in New York City, During the Years 1858 to 1861, Inclusive. Papers on Practical Engineering, No. 9. New York: D. Van Nostrand, 1863.
- Giraud, Marcel. Histoire de la Louisiane Française. 4 vols.

  Paris: Presses Universitaires de France, 1953-74. Vol.

  1: Le Règne de Louis XIV, 1698-1715 (1953); Vol. 2:

  Années de Transition, 1715-1717 (1958); Vol. 3: L'Époque

  de John Law, 1717-1720 (1966); Vol. 4: La Louisiane

  après le Système de Law, 1721-1723 (1974).
- Glick, Thomas F. <u>Irrigation and Society in Medieval Valencia</u>. Cambridge, Massachusetts: The Belknap Press of Harvard University Press, 1970.
- of San Antonio, Texas. Southwestern Studies. Monograph No. 35. El Paso: University of Texas at El Paso, Texas Western Press. 1972.
- Gras, Norman Scott Brien. A History of Agriculture in Europe and America. New York: F. S. Crofts & Co., Publishers, 1925.
- Gray, Lewis Cecil. History of Agriculture in the Southern United States to 1860. Vol. 1. Carnegie Institution of Washington, Publication No. 430. Washington, D.C.: 1933.
- Harris, Larry D., Rick Sullivan, and Lynn Badger. Bottomland
  Hardwoods: Valuable, Vanishing, Vulnerable. Gainesville, Florida: Cooperative Extension Service, University
  of Florida, Institute of Food and Agricultural Sciences,
  1984.
- Hayes, Ralph W. Trees and Forests of Louisiana. Baton Rouge, Louisiana: Bureau of Educational Materials, Statistics and Research, College of Education, Louisiana State University and Agricultural and Mechanical College, n.d.
- Holmes, Jack D. L. A Guide to Spanish Louisiana, 1762-1806. New Orleans: Privately printed, 1970.

- The 1779 "Marcha De Gálvez": Louisiana's Giant
  Step Forward in the American Revolution. Baton Rouge:
  Baton Rouge Centennial Corporation, 1976.
- Horn, Henry S. The Adaptive Geometry of Trees. Princeton, New Jersey: Princeton University Press, 1971.
- Houck, Louis. The Spanish Regime in Missouri. Vol. 1. Chicago: R. R. Donnelley & Sons, Co., 1909.
- Huber, Leonard V. Landmarks of New Orleans. New Orleans:
  The Louisiana Landmarks Society and the Orleans Parish
  Landmarks Commission, 1984.
- Jackson, Charles Tenney. The Fountain of Youth. New York: Outing Publishing Co., 1914.
- Kane, Harnett T. The Bayous of Louisiana. New York: W. Morrow and Co., 1943.
- King, Moses. King's Handbook of the United States. Buffalo: Moses King Corporation, 1891.
- Kniffen, Fred B. Louisiana: Its Land and People. Baton Rouge: Louisiana State University Press, 1968.
- Kolb, Charles R., and Jack R. Van Lopik. "Depositional Environments of the Mississippi River Deltaic Plain Southeastern Louisiana." In Martha Lou Shirley and James A. Ragsdale, eds., Deltas In Their Geologic Framework. Houston Geological Society. Houston: D. H. White & Co., 1966.
- La Farge, Oliver. The Mother Ditch. Santa Fe: Sunstone Press, 1983.
- Lafitte, Jean. The Journal of Jean Lafitte. New York: Vantage Press, 1958.
- Lands and Plantations belonging to the Citizens' Bank of Louisiana Offered for Sale or Rent on Favorable Terms. 1881 and 1882 eds. New Orleans: Copy in Louisiana Collection, Tulane University Library.

- Latour, Arsène Lacarrière. <u>Historical Memoir of the War in West Florida and Louisiana in 1814-15</u>. Translated by H. P. Nugent. Philadelphia: John Conrad and Co., 1816.
- Le Gardeur, Rene J., Jr., Samuel Wilson, Jr., Allen Begnaud, Gilbert Durbin, Robert L. Allain, F. A. Graugnard, Charles Hodson, and Harold S. Birkett. Green Fields:

  Two Hundred Years of Louisiana Sugar. Lafayette: University of Southwestern Louisiana, The Center for Louisiana Studies, 1980.
- Leopold, Luna B. <u>Water, A Primer</u>. San Francisco: W. H. Freeman & Co., 1974.
- nd M. Gordon Wolman. River Channel Patterns:

  Braided, Meandering and Straight. Physiographic and Hydraulic Studies of Rivers, Geologic Survey Professional Paper 282-B. Washington, D.C.: U. S. Government Printing Office, 1957.
- Le Page du Pratz, Antoine Simon. <u>Histoire de la Louisiane</u>. 2 vols. Paris: de Bure, La Veuve Delaguette, Lambert, 1758.
- . The History of Louisiana. Translated from the French. London: T. Becket and P. A. De Houdt, 1763.
- Lieber, Francis, ed. <u>Encyclopaedia Americana</u>. Philadelphia: Casey & Lea, 1830.
- Lowery, George, Jr. <u>Louisiana Birds</u>. 3rd ed. Baton Rouge: Louisiana State University Press, 1974.
- . The Mammals of Louisiana and its Adjacent Waters. Baton Rouge: Louisiana State University Press, 1978.
- McDermott, John Francis. The French in the Mississippi Valley. Urbana: University of Illinois Press, 1965.
- . The Spanish in the Mississippi Valley. Urbana: University of Illinois Press, 1974.

- McIntire, William. <u>Prehistoric Settlements of the Changing</u>

  <u>Mississippi River Delta</u>. Baton Rouge: Louisiana State

  <u>University Press</u>, 1958.
- McMurtrie, D. C. <u>Early Printing in New Orleans</u>. New Orleans: Searcy & Pfaff, 1929.
- McWilliams, Richebourg Gaillard, ed. and trans. <u>Iberville's</u>
  <u>Gulf Journals</u>. University, Alabama: The University
  <u>of Alabama Press</u>, 1981.
- Maduell, Charles R., Jr. Marriage Contracts, Wills and Testaments of the Spanish Colonial Period, in New Orleans, 1770-1804. New Orleans: Privately printed, 1969.
- Maier, Emile. A Story of Sugar Cane Machinery. New Orleans: Sugar Journal, 1952.
- Martin, François Xavier. The History of Louisiana. New Orleans: James A. Gresham, 1882.
- Martinez, Raymond J., and Jack D. L. Holmes. The Story of Spanish Moss and The Wax Tree. Jefferson, Louisiana: Hope Publications, n.d.
- Menge Patent Pump. Estate of Joseph Menge, Patentees, J. W.
  Westerfield, Manager, 631 Tchoupitoulas St., New Orleans.
  Copy in Louisiana Collection, Tulane University Library.
- Menier, Marie-Antoinette, Étienne Taillemite, and Gilberte de Forges. Archives Nationales, Inventaire des Archives Coloniales Louisiana sous Series C13A, C13B, C13C.

  Z vols. Paris: Archives Nationales, 1976.
- Molina Martinez, Miguel. "La Participacion Canaria en la Formacion y Reclutamiento del Batallon de Luisiana."

  In IV Coloquio de Historia Canario-Americana (1980), Tome II. Edited by Francisco Morales Padron. Cabildo Insular de Gran Canaria: Ediciones del Excelentisimo, 1982.

- Moorhead, Max L. The Presidio: Bastion of the Spanish Borderlands. Norman: University of Oklahoma Press, 1975.
- Náñez-Falcón, Guillermo. The Rosemonde E. and Emile Kuntz Collection: A Cataloge of the Manuscripts and Printed Ephemera. New Orleans: Howard Tilton Memorial Library, Tulane University, 1981.
- Norman, Benjamin Moore. <u>Norman's New Orleans and Environs</u>. New Orleans: B. M. Norman, 1845.
- Pénicaut, André. <u>Fleur de Lys and Calumet: Being the Pénicaut Narrative of French Adventure in Louisiana</u>. Edited and translated by Richebourg Gaillard McWilliams. Baton Rouge: Louisiana State University Press, 1953.
- The Penny Cyclopaedia of the Society for the Diffusion of
  Useful Knowledge. London: Charles Knight & Co.; New
  York: William Jackson; Philadelphia: Orrin Rodgers;
  Boston: Joseph H. Francis; Baltimore: W. N. Harrison,
  1839.
- Petroleum Extension Service, The University of Texas at Austin. Crude Oil Tanks: Construction, Strapping, Gauging and Maintenance. 5th ed. Austin, Texas: University of Texas at Austin, 1980.
- . Introduction to the Oil Pipeline Industry. 2nd ed. Austin, Texas: University of Texas at Austin, 1978.
- Petts, Geoffrey E. Sources and Methods in Geography. London: Butterworth and Co., 1983.
- Pitot, James C. Observations on the Colony of Louisiana from 1796 to 1802. Translated by Henry C. Pitot. Historic New Orleans Monograph Series. Baton Rouge: Louisiana State University Press, 1979.
- Plimpton, Pauline Ames, ed. Oakes Ames, Jottings of A Harvard Botanist, 1874-1950. Cambridge, Massachusetts: Botanical Museum of Harvard University, 1979.
- Post, Lauren C. <u>Cajun Sketches from the Prairies of Southwest</u>
  <u>Louisiana</u>. Baton Rouge: Louisiana State University

  Press, 1962.

- Proctor, Samuel, ed. <u>Eighteenth-Century Florida and Its</u>
  Borderlands. Gainesville: The University Presses of Florida, 1975.
- Rees, Abraham, ed. The Cyclopaedia or Universal Dictionary of Arts, Sciences and Literature. 39 vols. London:

  A. Strahan, Printer; Longman, Hurst, Reis, Orme & Brown, Publishers, 1819. First American edition in 41 vols. Philadelphia: Samuel F. Bradford & Murry, Fairman & Co., Publishers, n.d.
- Reeves, William D. <u>De La Barre, Life of a French Creole</u>

  Family in Louisiana. Jefferson Parish Historical Series

  Monograph IV. New Orleans: Polyanthus, 1980.
- Ressler, John Q. "Indian and Spanish Water-Control on New Spain's Northwest Frontier" In <u>The Spanish Borderland-A First Reader</u>. Edited by Oakah L. Jones, Jr. Los Angeles: Lorrin L. Morrison, 1974.
- Robertson, James Alexander. <u>Louisiana under the Rule of Spain, France, and the United States, 1785-1807</u>. 2 vols. <u>Cleveland, Ohio: The Arthur H. Clark Co., 1911</u>.
- Robson, John B. Louisiana's Natural Resources, Their Use and Conservation. Morristown, New Jersey: Silver Burdett Co., 1956.
- Rozier, Abbé François. Cours Complet d'Agriculture Théorique, Practique, Économique, et de Médecine Rurale et Vétérinaire: suivi d'une Méthode pour étudier l'Agriculture par Principes: ou, Dictionaire Universal d'Agriculture. 12 vols. Paris: Chez les Libraires Associés, 1793-1805.
- Russell, Richard J. River Plains and Sea Coasts. Los Angeles and Berkeley: University of California Press, 1967.
- Samuel, Martha Ann Brett, and Ray Samuel. The Great Days of the Garden District. New Orleans: Parents' League of the Louise S. McGehee School, 1961.
- Saucier, Roger. Recent Geomorphic History of the Pontchartrain Basin. Louisiana State University Studies, Coastal Studies Series No. 9. Baton Rouge: Louisiana State University Press, 1963.

- Saxon, Lyle. <u>Lafitte the Pirate</u>. New Orleans: Robert L. Crager and Co., 1930.
- Sibley, J. Ashley, Jr. Louisiana's Ancients of Man. Baton Rouge: Claitor's Publishing Division, 1967.
- Sitterson, J. Carlyle. Sugar Country, The Cane Sugar Industry in the South, 1753-1950. Lexington: University of Kentucky Press, 1953.
- Snowden, J. O., W. C. Ward, and J. R. J. Studlick. <u>Geology</u>
  of Greater New Orleans: Its Relationship to Land Subsidence and Flooding. New Orleans: New Orleans Geological Society, Inc., 1980.
- Soards, L. Soards' New Orleans City Directory. New Orleans: L. Soards. Publisher, 1885-1895.
- Stoddard, Major Amos. Sketches, Historical and Descriptive of Louisiana. Philadelphia: Matthew Carey, 1812.
- Surrey, Nancy M., ed. <u>Calendar of Manuscripts in Paris</u>

  <u>Archives and Libraries Relating to the History of the Mississippi Valley to 1803, 2 vols. Washington, D.C.: Carnegie Institution of Washington, Department of History Research, 1926.</u>
- . "The Commerce of Louisiana During the French
  Regime, 1699-1763." Studies in History, Economics and
  Public Law. Vol. 71, No. 1. New York: Columbia University Press, 1916.
- Swanson, Betsy. Historic Jefferson Parish, From Shore to Shore. Gretna, Louisiana: Pelican Publishing Company, 1975.
- Swanson, Donald C. Handbook of Deltaic Facies: A Collection of Practical and Useful Information and Exercises for the Subsurface Geologist. Lafayette, Louisiana: Prepared and published for the Lafayette Geological Society for use in their Subsurface Clastic Facies Workshop, 1980.
- Taylor, Joe Gray. Louisiana Reconstructed, 1863-1877. Baton Rouge: Louisiana State University Press, 1974.

- Thompson, Ray M. <u>The Land of Lafitte the Pirate</u>. Jefferson Parish, Louisiana: Jefferson Parish Yearly Review, 1943.
- Toledano, Roulhac and Mary Louise Christovich. New Orleans
  Architecture, Vol. VI: Faubourg Treme and the Bayou Road.
  Gretna, Louisiana: Pelican Publishing Company, 1980.
- Mary Louise Christovich, Samuel Wilson, Jr., and Sally K. Evans. New Orleans Architecture, Vol. IV: The Creole Faubourgs. Gretna, Louisiana: Pelican Publishing Company, 1974.
- Versailles Pecan Groves Will Make You Independent Only a Few Minutes from Canal Street. New Orleans: Gaidry Land Company, Inc., ca. 1916.
- Watson, Andrew M. Agricultural Innovation in the Early

  Islamic World: The Diffusion of Crops and Farming

  Techniques, 700-1100. Cambridge, England: Cambridge
  University Press, 1983.
- Weatherwax, Paul. <u>Indian Corn in Old America</u>. New York: The Macmillian Co., 1954.
- Welder, Frank A. <u>Processes of Deltaic Sedimentation in the Lower Mississippi River</u>. Technical Report No. 12.

  Coastal Studies Institute. Contribution No. 59.7.

  Baton Rouge: Louisiana State University, July 1, 1959.
- Wood, Virginia S. <u>Live Oaking: Southern Timber for Tall Ships</u>. Boston: Northeastern University Press, 1981.
- Works Progress Administration. Federal Writers Project.

  Louisiana, A Guide to the State. New York: Hastings
  House, 1941.
- ton, Mifflin Co., 1938.
- 6. Articles and Newspapers
- Arneson, Edwin P. "Early Irrigation in Texas." The Southwestern Historical Quarterly, vol. 25, no. 2 (October, 1921), pp. 121-130.

- Alexandria-Pineville, Louisiana, August 30, 1979, Section B, p. 9.
- Bay, Harry X. "The Two Birthdays of Oil." <u>Jefferson Parish</u> Yearly Review, Jefferson Parish, Louisiana (1959), pp. 53-213.
- "The Bell Crevasse." <u>Picayune Supplement</u>. New Orleans: Picayune Office, Sunday, May 16, 1858.
- Blanton, H. B. "Oil." <u>Jefferson Parish Yearly Review</u>, Jefferson Parish, Louisiana (1944), pp. 138-146.
- Bonck, Juanda, and W. T. Penfound. "Plant Succession on Abandoned Farm Land in the Vicinity of New Orleans, Louisiana." The American Midland Naturalist, vol. 33, no. 2 (March, 1945), pp. 520-29.
- Brown, Clair A. "Plants observed on an excursion to Grand Isle, Louisiana." Bulletin of the Torrey Botanical Club, vol. 57, no. 7 (October, 1930), pp. 509-13.
- Bushnell, David I., Jr. "Drawings by A. De Batz in Louisiana, 1732-1735." Smithsonian Miscellaneous Collections, vol. 80, no. 5 (December 1, 1927).
- Byrd, Kathleen Mary. "The Brackish Water Clam (Rangia Cuneata): A Prehistoric 'Staff of Life' or a Minor Food Resource?" Louisiana Archaeology, no. 3 (1976), pp. 23-31.
- Carter, George F. "The Role of Plants in Geography." The Geographical Review, vol. 36, no. 1 (January, 1946), pp. 121-31.
- Chatelain, Edward R. "Historic Ceramic." <u>Louisiana Archaeo-logical Society Newsletter</u>, vol. 6, no. 2 (April, 1979), pp. 8-11.
- Coleman, James M., and Sherwood M. Gagliano. "Cyclic Sedimentation in the Mississippi River Deltaic Plain." Transactions - Gulf Coast Association of Geological Societies, vol. 14 (1964), pp. 67-80.

- Conner, William H., and John W. Day, Jr. "Productivity and Composition of a Bald Cypress-Water-Tupelo Site and a Bottomland Hardwood Site in a Louisiana Swamp." American Journal of Botany, vol. 63, no. 10 (1976), pp. 1354-64.
- Cruzat, Heloise Hulse. "Sidelights on Louisiana History."

  Louisiana Historical Quarterly, vol. 1, no. 3 (January, 1918), pp. 96-147.
- Dabney, Thomas Ewing. "The Rising Tide of Black Gold."

  Jefferson Parish Yearly Review, Jefferson Parish, Louisiana (1940), pp. 12-27.
- Dart, Henry P. "The Career of Dubreuil in French Louisiana." Louisiana Historical Quarterly, vol. 18, no. 1 (January, 1935), pp. 267-331.
- "Decades of Industrial Destiny." <u>Jefferson Parish Yearly</u>
  Review, Jefferson Parish, Louisiana (1952), pp. 24-53.
- Din, Gilbert C. "The Canary Islander Settlements of Spanish Louisiana: An Overview." Louisiana History, vol. 27, no. 4 (Fall, 1986), pp. 353-373.
- . "Cimarrones and the San Malo Band in Spanish Louisiana." Louisiana History, vol. 21, no. 3 (Summer, 1980), pp. 237-62.
- . "The Death and Succession of Francisco Bouligny."

  Louisiana History, vol. 22, no. 3 (Summer, 1981), pp.

  307-15.
- Louisiana Studies, vol. 11, no. 1 (Spring, 1972), pp. 31-49.
- Proposals and Plans for Colonization in Spanish Louisiana, 1787-1790." Louisiana History, vol. 11, no. 3 (Summer, 1970), pp. 197-213.
- Louisiana, 1763-1779." Louisiana History, vol. 19, no. 2 (Spring, 1978), pp. 183-211.

- "Disappearing Louisiana Moss May Force Last Operating Gin to Close Down." The Times-Picayune, June 22, 1975.
- Downs, Catherine. "Science and Nature . . ." Forests and People, (Fourth Quarter, 1983).
- "Drilled from Islands." The Humble Way, (May-June, 1946).
- Dunn, Mary Eubanks, "Coquille Flora (Louisiana): An Ethnobotanical Reconstruction." Economic Botany, vol. 37, no. 3 (July-September, 1983), pp. 349-59.
- Editors and Staff of the Louisiana Historical Quarterly.
  "Index to the Spanish Judicial Records of Louisiana."

  Louisiana Historical Quarterly, vol. 6, no. 1 (January, 1923) vol. 29, no. 3 (July, 1946).
- Historical Quarterly, vol. 1, no. 1 (January, 1917) vol. 26, no. 1 (January, 1943).
- Faye, Stanley. "Privateersmen of the Gulf and Their Prizes." Louisiana Historical Quarterly, vol. 22, no. 4 (October, 1939), pp. 1012-94.
- "First Sugar Kettle Still in Existence." The Sunday Item-Tribune, New Orleans, Louisiana, January 31, 1937, p. 16.
- Fisk, H. N. "Recent Mississippi River Sedimentation and Peat Accumulation." In Ernest Van Aelst, ed., Congres pour l'Avancement des Etudes de Stratigraphic et de Geologie du Carbonifere, 4th, Heerlen, Netherlands, 1958: Compte Rendu, vol. 1, pp. 187-99.
- Proceedings Fourth World Petroleum Congress, Section 1/C, Paper 3, Rome, 1955, pp. 377-98.
- and E. McFarlan, Jr. "Late Quaternary Deltaic Depósits of the Mississippi River." In Crust of the Earth a Symposium: Geological Society of America Special Paper 62, 1955, pp. 279-302.

- Fisk, H. N., E. McFarlan, Jr., C. R. Kolb, and L. J. Wilbert, Jr. "Sedimentary Framework of the Modern Mississippi Delta." Journal of Sedimentary Petrology, vol. 24, no. 2 (June, 1954), pp. 76-99.
- Forsyth, Alice D. "Notes on Some of the Canary Islanders Who Settled in Louisiana." <u>L'Heritage</u>, vol. 1, no. 4 (September, 1978), pp. 268-76.
- Frazier, D. "Recent Deltaic Deposits of the Mississippi River, Their Development and Chronology." Transactions of the Gulf Coast Association of Geological Societies, vol. 17 (1967), pp. 287-315.
- Gayarre, Charles. "Historical Notes on the Commerce and Agriculture of Louisiana, 1720-1766." Louisiana Historical Quarterly, vol. 2, no. 3 (July, 1919), pp. 286-91.
- Ginn, Mildred Kelly. "A History of Rice Production in Louisiana to 1896." Louisiana Historical Quarterly, vol. 23, no. 2 (April, 1940), pp. 544-88.
- Glenk, Robert. "Crop Plants of Louisiana; How, When and Where They Originated." Louisiana Conservation Review, vol. 4, no. 1 (January, 1934), pp. 23-37, p. 55.
- Gowanloch, James Nelson. "Wildlife." <u>Jefferson Parish Yearly</u> Review. Jefferson Parish, Louisiana (1944), pp. 10-26.
- Greenleaf, Richard E. "Land and Water in Mexico and New Mexico 1700-1821." New Mexico Historical Review, vol. 47, no. 2 (April, 1972), pp. 85-107.
- Gregory, Pete. "The Woodland Culture of Louisiana Indians." Forests and People, vol. 32, no. 1 (First Quarter, 1982), pp. 27-29.
- Haag, William G. "Louisiana in North American Prehistory." Louisiana Studies, vol. 4, no. 3 (Winter, 1965), pp. 279-323.
- Hall, Thomas F., and William T. Penfound. "A Phytosociological Study of a Cypress-gum Swamp in Southeastern Louisiana." The American Midland Naturalist, vol. 21, no. 2 (March, 1939), pp. 378-395.

- Harris, Sara Ann. "The Stuff of Dreams." Louisiana Conservationist, (July/August, 1985), pp. 16-17.
- Harrison, Robert W. "The Louisiana Spanish Moss Industry."

  Louisiana Rural Economist, Louisiana State University,

  Department of Agricultural Economics, vol. 10, no. 2

  (May, 1948).
- Heminway, John. "An African Bird Makes Its Move Around the World." <u>Smithsonian</u>, vol. 18, no. 2 (May, 1987), pp. 60-68.
- Holland, W. C., William T. Penfound, Clair A. Brown, Percy Viosca, Jr., and George H. Lowery, Jr. "Distribution of the Flora and Fauna of Louisiana in Relation to its Geology and Physiography." The Proceedings of the Louisiana Academy of Sciences, vol. 8 (December, 1944), pp. 11-73.
- Holmes, Jack D. L. "Indigo in Colonial Louisiana and the Floridas." Louisiana History, vol. 8, no. 4 (Fall, 1967), pp. 329-49.
- . "Louisiana Trees and Their Uses: Colonial Period."

  Louisiana Studies, vol. 8, no. 1 (Spring, 1969), pp.

  36-67.
- Hubbard, Leonidas, Jr. "Barataria: the Ruins of a Pirate Kingdom." Atlantic Monthly, vol. 91 (June, 1903), pp. 806-14.
- Hutchins, Wells A. "The Community Acequia: Its Origin and Development." Southwestern Historical Quarterly, vol. 31, no. 3 (January, 1928), pp. 261-84.
- Jefferson Parish Yearly Review. Published for the Jefferson Parish Police Jury, Jefferson Parish, Louisiana, 1935-1981.
- Jones, O. Garfield. "Local Government in the Spanish Colonies as Provided by the Recopilacion de Leyes de Los Reynos de Las Indias." The Southwestern Historical Quarterly, vol. 19, no. 1 (July, 1915), pp. 65-90.

- Kallbrunner, Hermann. "Farms and Villages: The European Pattern." <u>Landscape, Magazine of Human Geography</u>, vol. 6, no. 2 (Winter, 1956-57), pp. 13-17.
- Kleck, David M. "Oil Is Ammo." <u>Jefferson Parish Yearly</u> <u>Review</u>, Jefferson Parish, Louisiana (1951), pp. 32-38.
- Knisley, O. S. "Lafitte Oil Field (Part One): The Record Breaking Oil Pool in Jefferson Parish." <u>Jefferson Parish Yearly Review</u>, Jefferson Parish, Louisiana (1938), pp. 79-82.
- Lenski, Lois. "Changing Times Along the Bayou." <u>Jefferson</u>

  Parish Yearly Review, Jefferson Parish, Louisiana

  (1943), pp. 94-95.
- "Louisiana Spanish Moss Ills Attributed to Fungus." <u>Times-Picayune</u>, November 7, 1976, sec. 1, p. 24.
- Moore, John Hebron. "The Cypress Lumber Industry of the Lower Mississippi Valley During the Colonial Period." Louisiana History, vol. 24, no. 1 (Winter, 1983), pp. 25-47.
- "Moss Research." Louisiana News Digest. (May, 1951).
- "New Life in the Venerable Louisiana Moss Industry." Louisiana News Digest, vol. 4, no. 6 (June, 1952).
- Noël-Hume, Ivor. "The what, who, and when of English creamware plate design." Antiques, vol. 101, no. 2 (February, 1972), pp. 350-54.
- Norgress, Rachael Edna. "History of the Cypress Lumber Industry in Louisiana." <u>Louisiana Historical Quarterly</u>, vol. 30, no. 3 (July, 1947), pp. 979-1059.
- Nuhrah, Arthur G. "John McDonogh: Man of Many Facets." Louisiana Historical Quarterly, vol. 33 (1950).
- "Pecan Growing and Pecan Soil in Louisiana," The Texas and Pacific Quarterly, vol. 15, no. 1 (January, 1912), p. 76.
- Penfound, William T., and Julian A. Howard. "A Phytosociological Study of an Evergreen Oak Forest." <u>The American</u> <u>Midland Naturalist</u>, vol. 23 (January-May, 1940), pp. 165-74.

- Poe, Edgar Allen. "Lafitte Oil Field." <u>Jefferson Parish</u> Yearly Review, Jefferson Parish, Louisiana (1937), pp. 89-93.
- Porteous, Laura L., trans. "Index to Spanish Records of Louisiana." Succession of Andres Juen, September 14, 1784. Louisiana Historical Quarterly, vol. 24, no. 4 (October, 1941), pp. 1258-80.
- Post, Lauren C. "The Domestic Animals and Plants of French Louisiana as Mentioned in the Literature with References to Sources, Varieties and Uses." Louisiana Historical Quarterly, vol. 16, no. 4 (October, 1933).
- "The Old Cattle Industry of Southwest Louisiana." McNeese Review, vol. 9 (Winter, 1957), pp. 43-55.
- Prophit, Willie. "The Swamp's Silent Sentinel, A History of Louisiana Cypress Logging." Forests and People, vol. 33 (Second Quarter, 1982), pp. 6-8, p.32, p. 35.
- Ramsey, Carolyn. "Bayou Bounty." The Saturday Evening Post, (January 23, 1943), pp. 26-27.
- Rees, Grover, trans. "The Dauterive Compact: The Foundation of the Acadian Cattle Industry." Attakapas Gazette, vol. 11, no. 2 (Summer, 1980), pp. 60-63.
- Rodriguez, Antonio Acosta, "Overview of the Consumption of Food and Goods by Isleno Immigrants to Louisiana."
  Translated and edited by Paul E. Hoffman. Louisiana
  History, vol. 22, no. 3 (Summer, 1981), pp. 299-306.
- Roehl, Marjorie. "Live oak's reign over two titles stems from root." The Times-Picayune/States-Item, New Orleans, undated 1986 clipping in files of Jean Lafitte National Historical Park.
- Romero, Orlando. "Las Acequias." New Mexico Magazine, vol. 57, no. 3 (March, 1979), pp. 30-34.
- "Royal Ordinances Concerning the Laying Out of the New Towns."

  The Hispanic American Historical Review, vol. 5, no. 2

  (May, 1922), pp. 249-54.
- Schoonover, Frank E. "In the Haunts of Jean Lafitte."

  Harper's Monthly Magazine, vol. 124 (December, 1911), pp. 80-91.

- Shaw, J. A., and Cyril K. Moresi. "Lafitte Oil Field (Part One)." <u>Jefferson Parish Yearly Review</u>, Jefferson Parish, Louisiana (1936), pp. 49-53.
- Shaw, J. A. "Louisiana Leads World in Deep Drilling." Louisiana Conservation Review, (Winter, 1937-1938).
- Simmons, Marc. "Settlement Patterns and Village Plans in Colonial New Mexico." A Journal of the West, vol. 18 (1969), pp. 7-21.
- New Mexico Historical Review, vol. 47, no. 2 (April, 1972), pp. 135-50.
- Smalley, Eugene V. "An Ancient Haunt of Pirates." St. Nicholas, vol. 15, no. 5 (March, 1888), pp. 323-37.
- "The Spaniard's Beard Goes to Market." Louisiana Conservation Review, (Autumn, 1937), pp. 21-26.
- "Spanish Moss, Roles Old and New." Aquanotes, Sea Grant

  Development, Louisiana State University, vol. 3, issue
  2 (April, 1974).
- Stanislawski, Dan. "Early Spanish Town Planning in the New World." The Geographical Review, vol. 37, no. 1 (January, 1947), pp. 94-105.
- The Origin and Spread of the Grid-Pattern Town."

  The Geographical Review, vol. 36, no. 1 (January, 1946),
  pp. 105-20.
- Stephens, Edwin L. "Annals of the Live Oak Society." Louisiana Conservation Review, vol. 5, no. 2 (April, 1936).
- "How Old Are the Live Oaks?" Issued with the <u>Alumni Bulletin</u>, Division of Extension, Southwestern Louisiana Institute, Lafayette, Louisiana, vol. 4, no. 3 (December, 1931).
- \_\_\_\_\_. "I Saw in Louisiana a Live Oak Growing." Louisiana Conservation Review, vol. 4, no. 2 (April, 1934), pp. 17-21.

- . "The Live Oak Society." Louisiana Conservation Review, vol. 4, no. 6 (April, 1935), pp. 25-29.
- Sterling, David Lee, ed. "New Orleans, 1801: An Account by John Pintard." <u>Louisiana Historical Quarterly</u>, vol. 34 (July, 1951), pp. 217-33.
- Stewart, R. C. "Lafitte Oil Field." <u>Jefferson Parish Yearly</u> Review, Jefferson Parish, Louisiana (1937), pp. 37-39.
- Yearly Review, Jefferson Parish, Louisiana (1936), pp. 53-57.
- the Texas Co. at Lafitte." Jefferson Parish Yearly Review, (1938), p. 83.
- Stielow, Frederick, ed. "The Bell Crevasse at Mavis Grove."

  Louisiana History, vol. 18, no. 4 (Fall, 1977), pp.

  474-78.
- Thomas, Alfred B., ed. "Governor Mendinuetta's Propesals for the Defense of New Mexico, 1772-1778." New Mexico Historical Review, vol. 6, no. 1 (January, 1931).
- Thompson, Ray M. "Industry." <u>Jefferson Parish Yearly Review</u>, Jefferson Parish, Louisiana (1943), pp. 9-30.
- Jefferson Parish Yearly Review, Jefferson Parish,
  Louisiana (1955), pp. 62-95.
- Tornero Tinajero, Pablo. "Canarian Immigration to America:
  The Civil-Military Expedition to Louisiana of 1777-1779."
  Translated and edited by Paul E. Hoffman. Louisiana
  History, vol. 21, no. 4 (Fall, 1980), pp. 377-86.
- Turner, Frederick. "Losing It in Louisiana." Wilderness, vol. 49, no. 171 (Winter, 1985), pp. 43-58.
- Twitchell, Ralph E. "Spanish Colonization in New Mexico in the Onate and De Vargas Periods." Historical Society of New Mexico, no. 22 (August, 1919), pp. 3-29.

- Usner, Daniel H., Jr. "A Cycle of Lowland Forest Efficiency:
  The Late Archaic-Woodland Economy of the Lower Mississippi Valley." Journal of Anthropological Research, vol. 39 (1983), pp. 433-44.
- Viosca, Percy, Jr. "Bayoulands of Jefferson." <u>Jefferson</u>

  <u>Parish Yearly Review</u>, Jefferson Parish, Louisiana (1943),

  pp. 45-58.
- Voorhies, Jacqueline. "The Attakapas Post: The First Acadian Settlement." <u>Louisiana History</u>, vol. 17, no. 1 (Winter, 1976).
- "What? An Even Bigger Baldcypress Champion?" Forests and People, vol. 31, no. 3 (Third Quarter, 1981).
- White, David A., Steven P. Darwin, and Leonard B. Thien.
  "Plants and Plant Communities of Jean Lafitte National
  Historical Park Louisiana." Tulane Studies in Zoology
  and Botany, vol. 24, no. 2 (July 20, 1983), pp. 100-29.
- Willey, Gordon R. "Plant Geography and Culture History in the American Southwest: A Review." Review of Plant Geography and Culture History in the American Southwest by George F. Carter. The Geographical Review, vol. 36, no. 1 (January, 1946), pp. 132-34.
- Wilson, Samuel, Jr. "The Will of Hillaire Boutte." Louisiana History, vol. 23, no. 1 (Winter, 1982), pp. 68-73.