

PH06701 46

DATA SHEET

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

FOR NPS USE ONLY	
RECEIVED	APR 14 1976
DATE ENTERED	AUG 11 1976

# NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

SEE INSTRUCTIONS IN HOW TO COMPLETE NATIONAL REGISTER FORMS  
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

**1 NAME** \*\*  
 HISTORIC ~~Ingenio Esperanza~~ *LA HACIENDA AZUCARERA LA ESPERANZA (SUGAR MILL)*  
 AND/OR COMMON  
 La Esperanza

**2 LOCATION** *W of Manatí*  
 STREET & NUMBER Route - P. R. #616  
 CITY, TOWN Manatí VICINITY OF Puerto Rico  
 STATE Puerto Rico CODE (81) 745 COUNTY Manatí CODE 0620

**3 CLASSIFICATION**

CATEGORY	OWNERSHIP	STATUS	PRESENT USE
<input type="checkbox"/> DISTRICT	<input type="checkbox"/> PUBLIC	<input type="checkbox"/> OCCUPIED	<input checked="" type="checkbox"/> AGRICULTURE <input type="checkbox"/> MUSEUM
<input type="checkbox"/> BUILDING(S)	<input checked="" type="checkbox"/> PRIVATE	<input checked="" type="checkbox"/> UNOCCUPIED	<input type="checkbox"/> COMMERCIAL <input type="checkbox"/> PARK
<input type="checkbox"/> STRUCTURE	<input type="checkbox"/> BOTH	<input type="checkbox"/> WORK IN PROGRESS	<input type="checkbox"/> EDUCATIONAL <input type="checkbox"/> PRIVATE RESIDENCE
<input checked="" type="checkbox"/> SITE	<b>PUBLIC ACQUISITION</b>	<b>ACCESSIBLE</b>	<input type="checkbox"/> ENTERTAINMENT <input type="checkbox"/> RELIGIOUS
<input type="checkbox"/> OBJECT	<input type="checkbox"/> IN PROCESS	<input checked="" type="checkbox"/> YES: RESTRICTED	<input type="checkbox"/> GOVERNMENT <input type="checkbox"/> SCIENTIFIC
	<input type="checkbox"/> BEING CONSIDERED	<input type="checkbox"/> YES: UNRESTRICTED	<input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> TRANSPORTATION
		<input type="checkbox"/> NO	<input type="checkbox"/> MILITARY <input type="checkbox"/> OTHER:

**4 OWNER OF PROPERTY**  
 NAME Puerto Rico Conservation Trust Fund  
 STREET & NUMBER P. O. Box 4747  
 CITY, TOWN San Juan VICINITY OF STATE Puerto Rico 00905

**5 LOCATION OF LEGAL DESCRIPTION**  
 COURTHOUSE, REGISTRY OF DEEDS, ETC. Registry of Deeds, Arecibo, Puerto Rico  
 Folio 77  
 Entry 153  
 Volume 515  
 STREET & NUMBER Commonwealth Government Center, P. O. Box 209-B  
 CITY, TOWN Arecibo STATE Puerto Rico 00612

**6 REPRESENTATION IN EXISTING SURVEYS**  
 TITLE (1) Tierras Nuevas Archeological Survey  
 (2) Historic American Engineering Survey *RECORD* (to commence on June 1st, 1976)  
 DATE November 15, 1975  FEDERAL  STATE  COUNTY  LOCAL  
 DEPOSITORY FOR SURVEY RECORDS Puerto Rico Institute of Culture / *LIBRARY of CONGRESS.*  
 CITY, TOWN San Juan / *WASHINGTON* STATE Puerto Rico / *DC*

# 7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
<input type="checkbox"/> EXCELLENT	<input checked="" type="checkbox"/> DETERIORATED	<input checked="" type="checkbox"/> UNALTERED	<input checked="" type="checkbox"/> ORIGINAL SITE
<input type="checkbox"/> GOOD	<input type="checkbox"/> RUINS	<input type="checkbox"/> ALTERED	<input type="checkbox"/> MOVED      DATE _____
<input type="checkbox"/> FAIR	<input checked="" type="checkbox"/> UNEXPOSED (Largely)		

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DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The Ingenio or Hacienda La Esperanza is a 2, 265-acre tract of land at the mouth of the Manatí River, on the north coast of Puerto Rico. The property has 5.5 kms. of exceptional seascape of cemented dunes. Its southern boundary is a karst formation, densely wooded with century-old trees. The rest is an alluvial plain of great agricultural productivity.

The Hacienda was owned by José Ramón Fernández, Marques de La Esperanza, who by 1873 had expanded the limits of his father's legacy to its present state, and had established the most advanced and wealthiest agroindustrial complex in Puerto Rico at the time, for the production of molasses, sugar and rum.

The main components of the Ingenio or Hacienda are located on a mound in the middle of the land. These are the sugar mill and factory, the foundation walls of one of the barrack-like structures used as slave quarters and the plantation house. A kiln to manufacture bricks and to process lime from the karst formation lies outside the main group, close to the limestone quarry.

The sugar mill and factory was a brick structure. The part that housed the kettles and evaporators is rectangular; three of the walls still stand. They show excellent detailing in the fenestration and in the Tuscan cornice. The corrugated steel hip roof is supported by wooden trusses resting on interior wood columns. A deep cylindrical cistern with a vaulted roof and a hexagonal opening lies outside the north entrance to this structure.

Part of this structure housing the mill and factory was demolished but some walls and second story arches, as well as an arch running in the direction of a 110-foot high chimney, still remain.

The chimney is made of brick, with a square base about ten feet high bearing large medallions topped by a cornice. Looking up to the narrowing top of the tall structure one can make out very elaborate and carefully designed ornamentations.

On the side of a wall close to the chimney, there are three openings which were presumably used for firing the ovens under the floor of the building to heat the evaporators. The other end of the building housed the sugar mill.

The mechanical system of this machinery, manufactured by the West Point Foundry, Cold Spring, New York, in 1861, consists of three parts, at present, intact.

First, there is a high-pressure steam engine of the stationary type, with a walking beam and a vertical cylinder. It is housed in a cast-iron structure supported by six quatrefoil columns which are interconnected with intricately decorated Tudor arches. Adjoining the engine, there is a large open-web flywheel, about 16 feet in diameter. The engine and its governor are connected by step pulleys of three different diameters, allowing the process to operate at any of three speeds.

The second part of the machinery is the transmission, a set of gears ranging in diameter from 12 inches to 6 feet. These transmitted power from the engine to the sugar mill.

The third part is the mill itself: three large cylindrical, smooth-surfaced crushers which forced the juice out of the cane stalks. Only one cylinder, the uppermost, received power directly from the transmission. The other two acted with the movement of the top cylinder through their own gearing system.

(See continuation sheet)

# 8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
<input checked="" type="checkbox"/> PREHISTORIC	<input checked="" type="checkbox"/> ARCHEOLOGY-PREHISTORIC	<input type="checkbox"/> COMMUNITY PLANNING	<input type="checkbox"/> LANDSCAPE ARCHITECTURE	<input type="checkbox"/> RELIGION
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> ARCHEOLOGY-HISTORIC	<input type="checkbox"/> CONSERVATION	<input type="checkbox"/> LAW	<input type="checkbox"/> SCIENCE
<input type="checkbox"/> 1500-1599	<input checked="" type="checkbox"/> AGRICULTURE	<input checked="" type="checkbox"/> ECONOMICS	<input type="checkbox"/> LITERATURE	<input type="checkbox"/> SCULPTURE
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> ARCHITECTURE	<input type="checkbox"/> EDUCATION	<input type="checkbox"/> MILITARY	<input type="checkbox"/> SOCIAL/HUMANITARIAN
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> ART	<input checked="" type="checkbox"/> ENGINEERING	<input type="checkbox"/> MUSIC	<input type="checkbox"/> THEATER
<input checked="" type="checkbox"/> 1800-1899	<input checked="" type="checkbox"/> COMMERCE	<input type="checkbox"/> EXPLORATION/SETTLEMENT	<input type="checkbox"/> PHILOSOPHY	<input type="checkbox"/> TRANSPORTATION
<input type="checkbox"/> 1900-	<input type="checkbox"/> COMMUNICATIONS	<input checked="" type="checkbox"/> INDUSTRY	<input checked="" type="checkbox"/> POLITICS/GOVERNMENT	<input type="checkbox"/> OTHER (SPECIFY)
		<input type="checkbox"/> INVENTION		

SPECIFIC DATES 550A. D. , 655A. D. 1390 A. D. BUILDER/ARCHITECT Unknown  
and 1820

## STATEMENT OF SIGNIFICANCE

The significance of La Esperanza lies in the extent to which it demonstrates the island's history, the life and culture of its aboriginal people and of its colonization and settlement by non-indigenous people, Europeans and Africans.

Sugar cane was introduced to the New World through Hispaniola, by Christopher Columbus on his second voyage in 1493, the year Puerto Rico was discovered. It was brought to the island early in the 16th century with the first wave of Spanish settlers. By mid-16th century the island already had a Crown-supported water-powered sugar mill. Toward the end of the century, sugar had become the island's leading commercial crop.

In the early 17th century, Puerto Rico was designated a military outpost to defend Spain's New World holdings from the onslaught of rival European powers. The island ports were closed to legal trade and for the next two centuries--the 17th and 18th--Puerto Rico was economically dead.

By the start of the 19th century Spain started to decline as a major world power and Puerto Rico no longer served a useful military purpose. By 1815, the Cédula de Gracias reopened the ports and lifted the trade restrictions of Puerto Rico.

With international trade possible again, Puerto Rico's sugar industry became again a leading factor in the island's economic life. By 1870, 30% of Puerto Rico's arable lands were devoted to sugar cane.

The 19th century marked the improvement of sugar production methods. By 1879, after the American Civil War, which made the United States rather than Spain, the principal customer of Puerto Rican sugar, production soared to 221,220 tons per year.

Hacienda La Esperanza originated during that period. It was owned by Don José Ramón Fernández, Marques de La Esperanza--it is thought he may have purchased the title--who was born about 1804 in San Juan, Puerto Rico, the son of a retired Spanish military man. He was educated in England and lived for a time in the United States. By 1850 he was administering his father's 825-acre farm in Manatí, which was probably obtained from the Spanish Crown as payment for military services.

According to evidence in the General Archives of Puerto Rico, by 1854, the Marques had already inherited the farm from his father and had started to enlarge his holdings with the purchase of an adjacent estate, Hacienda San José. With the gradual acquisition of other adjoining properties, by 1873, he owned 2,265 acres, which transformed La Esperanza from an ordinary sugar farm into the largest, wealthiest and most advanced sugar plantation in Puerto Rico.

(See Continuation Sheet)

# 9 MAJOR BIBLIOGRAPHICAL REFERENCES

## Hacienda La Esperanza

Cruz Monclova, Lidio. Historia de Puerto Rico (Siglo XIX). Vol. II (1st and 2nd Parts). University of Puerto Rico Press, 1957.

Moreno Fragnals, Manuel. El Ingenio: El Complejo Económico Social Cubano del Azúcar. Vol. I (1760-1860). Comisión Nacional Cubana de la UNESCO.

1964.

# 10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 2,265

### UTM REFERENCES

A	19	14,605,0	17,240,4	B	19	14,605,0	16,818,7
	ZONE	EASTING	NORTHING		ZONE	EASTING	NORTHING
c	19	14,137,6	16,818,7	d	19	14,137,6	17,240,4
	ZONE	EASTING	NORTHING		ZONE	EASTING	NORTHING

### VERBAL BOUNDARY DESCRIPTION

North: Atlantic Ocean  
 South: Karst Hills, the P. R. Land Authority and Various Owners  
 East: Route - P. R. #685  
 West: Manatí River

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

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

# 11 FORM PREPARED BY

NAME / TITLE

Francisco Javier Blanco, Executive Director

ORGANIZATION

Puerto Rico Conservation Trust

DATE

April 7, 1976

STREET & NUMBER

P. O. Box 4747

TELEPHONE

(809) 722-5834 and 722-3190

CITY OR TOWN

San Juan, Puerto Rico 00905

STATE

Puerto Rico

# 12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL X

STATE     

LOCAL     

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

*Luis M. Rodríguez Morales* Luis M. Rodríguez Morales

TITLE Puerto Rico State Historic Preservation Officer

DATE 9 April 1976

### FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

acting

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

ATTEST: *Charles DeYoung*  
 SUPERVISOR OF THE NATIONAL REGISTER

DATE

8/11/76

DATE

2-3-76

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CONTINUATION SHEET Description ITEM NUMBER 7 PAGE Page 1

Of the barrack-like structure used as slave quarters, only the perimeter brick foundation wall still stands.

The plantation house was built as residence, office and administrative quarters of the estate. The house, which remains almost intact, is a two-story rectangular wood frame structure. Native hardwoods such as mahogany, ironwood and ortegón, were used in its construction. It is simple and austere. The exterior is all flush siding, its boards varying in width.

The ground level is free of partitions, but for a small brick room that must have served as a hurricane shelter. It also has a cistern almost identical in design to that at the factory.

At the very center of its facade, a steep fan-shaped stairway extends from the garden to a balconied foyer on the second floor. The balcony leads to a large living room which is about a third the length of the house. On either side of the living room are rooms large and small, eight in number. Behind the living room and adjacent rooms and running the entire eastern length of the house is a gallery eight feet deep, opening to the morning sun through a series of windows--probably persiennes in their days. At both ends of this facade there are balconies opening from what were possibly a bedroom and the dining room.

The room that was probably the Marques' studio bedroom is of interest. The ceiling is in the form of a truncated pyramid. It has three, twelve feet high french doors with wrought-iron railings.

Of architectural interest is the variety of roofs used in the house. A gabled roof covers the living room. Hip roofs are over the adjacent rooms and lean-tos cover the gallery and the two balconies.

About a mile from the complex, the Marques built a large kiln for the production of lime, a purifier used in the processing of sugar. The limestone from which lime was extracted was quarried from the haystack hills adjacent to the kiln. It was also used for the manufacture of bricks. This brick structure, in the shape of a cylinder, is sustained by eight buttresses, one serving as a stairway to the top.

The original physical condition of the Ingenio or Hacienda is recorded in a survey and topographical map commissioned by the Marques in 1872, which shows the property boundaries as they are today. It also illustrates all the buildings of the Hacienda at the time.

According to that survey, the complex was composed of nine buildings arranged around a large rectangular open space or batey. (Batey is an aboriginal word used here to denote the space used as work area, orchard and ceremonial ground.) The plantation house defines this space to the east. The sugar mill and factory is the western boundary of this central space. Sheds and barracks completed the enclosure on the other two sides. The complex occupied approximately 10 acres.

There was only one building outside of this space, to the west of the mill and factory, a long narrow shed that, given its location, could have been a warehouse for

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the finished products, sugar, molasses and rum.

The mill and factory, the largest structure in the complex, was a latin cross in plan, with a long axis running north to south. The steam engine was housed at the head of the cross. The base of the chimney was enclosed in one of the cross arms.

The survey also shows that the house has not suffered alterations or major changes in its original shape or structure. It also shows that in the rational process of expansion, the Marques had consolidated another hacienda, Ingenio San José, to his estate. Of the five structures of that hacienda, only the arched abutments of one of the many bridges over the canals of the irrigation and flood control system running throughout the whole farm, still stand.

Very recently, an archeological site of significance has been found at the mouth of the Manatí River, at the western boundary of the property, on a dale protected by tall sand dunes and limestone formations.

The physical and geographical aspects of the area have not been greatly altered and are not much different from the original condition of the site.

The aboriginal settlement there was the only modifying element of the place. It is estimated that the place was continuously settled from 550 to 1500 A. D. There is no significant evidence that white man settled the place on a permanent basis.

At the extreme east end of the dale there was a small lagoon, now dried up but for the rainy season. The vegetation found there consists mainly of seagrapes (*Coccoloba uvifera* L.), indian almond (*Terminalia catappa* L.) and different types of grasses. With the exception of the indian almond, the rest of the vegetation is indigenous to the island.

Up to now the site has revealed the existence of a ceremonial ground with four ball courts, and at least five deposits of their cultural remains. Funeral interments and cooking areas have also been found.

The stratigraphy illustrates that three cultures settled the site: Igneri, Ostiones and Taino. Radiocarbon analyses were made on all the material retrieved from the excavation in order to establish the cultural chronology of the aboriginal settlement.

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**CONTINUATION SHEET** Significance      ITEM NUMBER 8      PAGE Page 1

The Marques was a man who played an interesting, if minor, role in the major events of the century. He was an unusually resourceful merchant-planter who enjoyed a large degree of political power as well. The times he lived in were also unusual, for it was when Puerto Rico starts to take a strong hold of its own affairs, and to come to life politically, culturally and economically. For the first time since its colonization, Puerto Rico began to wield a certain amount of power in the Spanish Cortes and to expand its economy at an unprecedented rate.

During that period, the Marques converted the farm into an industrial complex that produced sugar, molasses and rum. He also increased the value of his estate investing heavily in slaves. It is possible that La Esperanza was the only farm in Puerto Rico operated wholly by slaves--other plantations used a combination of slave and free labor. By 1873, the Marques was the largest slave holder in Puerto Rico, with 175 slaves. (The 1860 Census indicates that there were 112 slaves at Hacienda La Esperanza.)

Connections made in England and the United States provided the Marques with an endless source of capital to expand his farm and to invest in a food and textile business which made him one of the wealthiest men on the island. He formed a partnership with G. E. Lattimer, U. S. Consul in San Juan, and together, turned this enterprise into one of the island's most prosperous.

By mid-19th century, Puerto Rico's abolition movement started to pick up strength. The Marques, as the single largest slave owner and a leading figure in the powerful Conservative Party, used every means to destroy it, including raids on the homes of the leading abolitionists. (Coll y Toste, Cayetano. Selecciones de Leyendas Puertorriqueñas. Editorial Pareja, Barcelona, 1930.)

Although his downfall began with the abolition of slavery, what finally defeated him was the sugar mill which he had bought a few years before, in 1861, from the West Point Foundry, in New York. This sugar mill was very advanced for the time. For reasons still unknown, he mechanized only one step--the first one--in the sugar-making process. As a result, he created a very inefficient situation, for the mechanical crushers produced more juice than the boilers could handle.

In the 1880s, the Marques fell into debt trying to pay back the amounts he had borrowed for the purchase of the mill. By that time he was totally blind and completely ruined except for his farm. After his death in May 1886, at the age of 80, Hacienda La Esperanza was put on the block to the best bidder.

Hacienda La Esperanza is the only open undeveloped tract of land, in the hands of one owner, left in the north coast of Puerto Rico. Its rich alluvial soil is well suited to agriculture.

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The western boundary of the property is the Río Grande de Manatí. In the 19th century, the Marques had his own port facilities at its mouth, sending his products down to the sea where boats would transport them to San Juan. The northern boundary is the Atlantic Ocean. Tall breakers slam against the reefs and cemented dunes pouring over them to form small swimming coves.

To the south and east, there is a system of steep conical hills of limestone, part of the remarkable karst region of Puerto Rico. Looking south from the plain, there is an almost unbroken view of green foothills backed by the heights of the Cordillera Central which divides the island into a green northern side and a dry, desert-like southern one. (Fray Iñigo Abbad y Lasierra. Historia Geográfica, Civil y Natural de la Isla de San Juan Bautista de Puerto Rico. (1782). Pages 123-124. University of Puerto Rico Press, 1966. Also André Pierre Ledru. Viaje a la Isla de Puerto Rico en el Año 1797. Editorial Coquí, San Juan, 1971.

La Esperanza is the most complete and well preserved example of a sugar cane plantation of the 19th century left on the island. It is also the best example of the self-sufficient, autonomous economic microcosm which was the hacienda. It played a very influential role in the cultural and political life of Puerto Rico. The economic base of this hacienda system was always one cash crop, be it sugar or coffee. In the case of La Esperanza, it was sugar and other products derived from it. All other crops were supplemental and served the inner purpose of sustenance for the population of the nucleus.

With respect to their influence in the political life of the time, almost all the plantation owners were conservative, strict believers that Spain should have a strong hand in all the facets of the Puerto Rican life, and that Puerto Rico should be an integral part of the mainland. Every manifestation of desire to attain self-government or to ease the centralized regime in the island was seen as a threat to the established order. With respect to the economy, the plantation owner, enjoying the bonanza of liberalized trade, now finding relatively easy to make a profit, looked to stability expansion and innovation.

With the reopening of the ports and free trade, there was access to foreign sources of capital, mainly from the United States and England. But when credit was abused and capital became scarce, financiers became owners and the apparent wealth of many of the most noted plantation owners diminished or vanished completely, and so their influence.

With the outbreak of the American Civil War in 1861, the northern states lost their source of sugar. Union merchants turned to the West Indies for their supply. In order to be able to fill this new demand for sugar and its by-products, the mills had to be modernized. So, these merchants served also as financiers for the purchase of new, more advanced systems than those in use at the time, either ox-or water-powered.

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The machinery at La Esperanza is possibly the first steam-powered machine of its kind introduced into Puerto Rico.

According to officials of the Museum of History and Technology of the Smithsonian Institution, who inspected the machine, this type of steam engine and sugar mill is possibly the only one left in the United States or the West Indies. It is also the only example left of the type of machinery manufactured by the West Point Foundry, at Cold Spring, New York.

Only drawings of two steam pumping engines made by this company remain: one manufactured in 1852 for the Navy Yard Drydock in Brooklyn, and another in 1874 for the Albany City Water Works. They are part of the Smithsonian print collection.

The West Point Foundry is by itself of importance. This foundry was organized in 1818 and, along with other three, was government subsidized to manufacture primarily ordnance. (The War of 1812 demonstrated that the United States lacked heavy artillery.)

By 1836 Robert Parrott, assistant of ordnance for the Department of War was sent to Cold Spring to supervise ordnance manufacture at the foundry. It was here where he designed and built the famous Civil War cannon known as the "Parrott rifle." One such cannon, the "Swamp Angel", was used in the siege of Charleton. (Source: The New York State Library, Department of Science and Technology.)

The presence of this steam engine and sugar mill in Puerto Rico is evidence of the historical link that has existed between the island and the United States as far back as the 18th century. (Arturo Morales Carrión. Puerto Rico and the Non-Hispanic Caribbean: A Study in the Decline of Spanish Exclusivism. University of Puerto Rico Press, 1952.)

**Significance of the Archeological Site:**

With the assistance of the Institute of Puerto Rican Culture, the Conservation Trust has sponsored the survey of an archeological site at La Esperanza.

Radiocarbon tests were made of the material retrieved at the site. These show that the site was inhabited by Igneri aborigines by 550 A.D. The Ostiones culture settled the place by 655 A.D. In one of the excavations, at a depth of approximately 1.5 meters, material of the Taino culture was found, tracing its date to 1390 A.D.

The findings at Hacienda La Esperanza demonstrate that the importance of the site lies on the following:

---It is the first archeological site on the north-central area of the island which presents a cultural stratigraphy and chronology that indicate three cultural phases: Igneri, Ostiones and Taino, which means a period of continuous occupation of more than 1,000 years.

---It is the first aboriginal ceremonial center on the coast that has been found in the Antilles.

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---It is the first archeological site in Puerto Rico of which there are historic references and from which the archeological material gathered has shown new historic evidence to back theories related to the conquest and colonization process of Puerto Rico.

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CONTINUATION SHEET Bibliography      ITEM NUMBER 9      PAGE 1

Hacienda La Esperanza (Continued)

- Nistal Moret, Benjamín. Estudio Histórico sobre la Hazienda La Esperanza  
(M. S.). Conservation Trust of Puerto Rico, San Juan. 1975  
(A compilation of relevant documents at the General Archives  
of Puerto Rico.)
- Pursell, Jr., Carroll W. Early Stationary Steam Engines in America: A Study  
in the Migration of a Technology. Smithsonian Institution Press.  
Washington City, 1969.

Archeological Site

- Alegría, Ricardo E. The Ball Game Played by the Aborigines of the Antilles.  
Revista Mexicana de Estudios Antropológicos. Vol. XII. 95-102.  
Mexico, 1951.
- On Puerto Rican Archeology. American Antiquity. Vol. 31.  
2:246-249. Salt Lake City, 1965.
- El Centro Ceremonial Indígena de Utuado. Institute of Puerto Rican  
Culture, San Juan. N. D.
- Dávila y Dávila, Ovidio. Informe Preliminar de las Excavaciones Arqueológicas  
en Progreso en el Yacimiento Tierras Nuevas Poniente, Manatí,  
Puerto Rico. (M. S.) Institute of Puerto Rican Culture. San Juan, 1975.
- La Fotografía Aérea y la Arqueología: Excavaciones Arqueológicas  
en la Boca del Río Grande de Manatí. Institute of Puerto Rican  
Culture. San Juan, 1976.
- Rouse, Irving. Prehistory of the West Indies. Science. Vol. 144, No. 3618,  
May 1st. 499-513. 1964.
- Rouse, Irving, Ricardo E. Alegría, and Minze Struiver. Recent Radiocarbon  
Dates from the West Indies. Manuscript at Department of  
Anthropology. Yale University. New Haven, 1963.