

HACIENDA

Buena Vista

Taking an eco-detour for a cup
of prized Puerto Rican coffee

STORY AND PHOTOGRAPHY BY BENNETT ROOT, JR.





From that Eureka! Moment in the Middle Ages when an Ethiopian goat herder discovered what his goats already knew—a little coffee was a great way to start the day—human beings have enjoyed the tastes and magical properties derived from coffee beans. Coffee is now produced in many places throughout the world, but in the mountains north of Ponce, on Puerto Rico's Caribbean shore, late 19th century growers produced some of the world's most prized coffee beans. On a recent Eco-Detour from daily living, we were treated to a cup of this rich coffee produced from Don Salvador Vives' Buena Vista Plantation, recently restored to its remarkable original working state by Puerto Rico's Conservation Trust. The Trust, and the arc of its special mission, is a story to which we'll return; for now, however, we're still savoring the coffee and the experience of this jungle stopover.

Vives and his family came to Puerto Rico in the early 19th century from the tumult of revolution in Venezuela. Unable to afford flat land appropriate for sugar cane cultivation, Don Salvador Vives bought 500 acres of mountainous jungle on the Canas River, north of Ponce. Initially, this land fed the cane workers with plantains and corn. To produce corn meal, farm animals turned gigantic millstones. Soon enough, however, Vives' son started building for the plantation's future by substituting hydro power from the Canas River for traditional animal power. This required

Drying racks for de-pulped green coffee, workers quarters and plantation house (inset above) were at the heart of plantation life. They have been meticulously restored by the Conservation Trust to permit visitors a rare glimpse of life in Puerto Rico's Caribbean jungle some 150 years ago.

"Shade coffee" grows
under the forest canopy,
protected from direct sun.
The result is a coffee that is
more mellow and flavorful.





Tropical flowers in screamingly bright primary colors punctuate the Hacienda's grounds.



Coffee "grinder" from the plantation's early years.



Dried coffee beans ready for roasting.

an intricate water diversion channel and an eighteen foot water wheel. And approval of the colonial government regarding how the water was to be used.

A decade later, the Vives family continued the steady development of its jungle homestead. With a prescience responsive to evolving market conditions, Vives' grandson modified the plantation's crop mix, planting coffee bushes under the protective shade of overarching cocoa trees. These bushes would produce beautiful red berries—shade coffee—to the subsequent

delight of palates in Europe and the United States. The new crop required redesign of the plantation and relocation of the mill. As redesigned, the existing water wheel provided the power to new machinery which automated the de-pulping and husking of the coffee berries. To drive his relocated corn mill, Vives conceived and created a clever variant of a Baker water turbine to harness power from an underground water flow. The magic worked. Vives' coffee and corn flour gained substantial traction in the marketplace, valued for their reliable

quality. Thus, the Buena Vista Plantation became one of the most successful agricultural businesses of its time. Location, vision, innovation and perseverance, all in harmony.

At Buena Vista, the coffee berries are harvested in the fall, soaked and then de-pulped, husked and dried. We watched expectantly as the water channels were opened and the giant wheel groaned into fluid motion. Gears ground, wheels turned, belts applied power to synchronized processes. The berries' pulp and the beans' husks were removed so green



coffee beans could dry and blanch in the hot Caribbean sun. After drying, the beans could be roasted in cylindrical vessels hand-turned over hot charcoal. Unlike the mechanized depulping, at Buena Vista getting the right roast is an individualized art form. The roasting cylinder is two feet long and about 6 inches in diameter. Hand-cranking over live coals allows the beans to be turned so that each side of each bean is exposed to just the right amount of heat. As the heat dries the bean and caramelizes its sugars, there is a pop not unlike corn popping over heat. The amount (and uniformity) of the heat determines

for the 1850s! A bit less than a half mile of canals, complete with gates, diversions and returns would be reclaimed from the jungle. A regulatory nightmare, one might argue. But the system worked. While hiking to the falls that provided the power for the plantation, we heard the roar of, then saw a rush of water returning down a spillway to the river below the waterwheel. Looking at the completed system now restored to its previous finesse, one could see how mastery of this grant of water rights with canals and a water wheel permitted the plantation to increase coffee production from five tons per year in the early

tion is rarer still. The gearing was conceived on site and drawings sent to the West Point Foundry in Cold Springs, New York. Months later, the “mail order” parts arrived by ship and were successfully assembled to spectacular result. Both the original design and the restoration are recognized by the American Society of Mechanical Engineers. The Society of Industrial Archeology cited this turbine as an important “missing link” in the evolution of hydro power systems.

Because our trip to Buena Vista was as remarkable as it was, it is difficult to conceive that this jewel of Puerto Rican patrimony lay in ruins in the

Mechanization at the Buena Vista allowed major increases in plantation yields, making the Buena Vista Hacienda a cutting edge innovator and remarkably successful for its time. Harvested coffee beans were brought to the processing area, all by traditional means. Then the eighteen foot water wheel was activated (no. 1) by an astonishingly sophisticated water diversion mechanism. The power from the turning wheel drove the mechanized de-pulper (no. 2). De-pulped beans were spread out on drying racks (no. 3) to bake in the hot Caribbean sun. Dried beans (no. 4) were hand roasted (no. 5) in a small metal cylinder (no. 6) allowing a skilled roaster to produce a wide variety of tastes from mildly aromatic to a robust, fully caramelized roast akin to today's French Roasts. Hot beans from the roaster were set out to finish and cool (no. 7) before being ground up for coffee. Early twentieth century grinder and packaging for beans and ground coffee (no. 8) are on display (and available for brewing) at the hacienda's site next to the original plantation house.

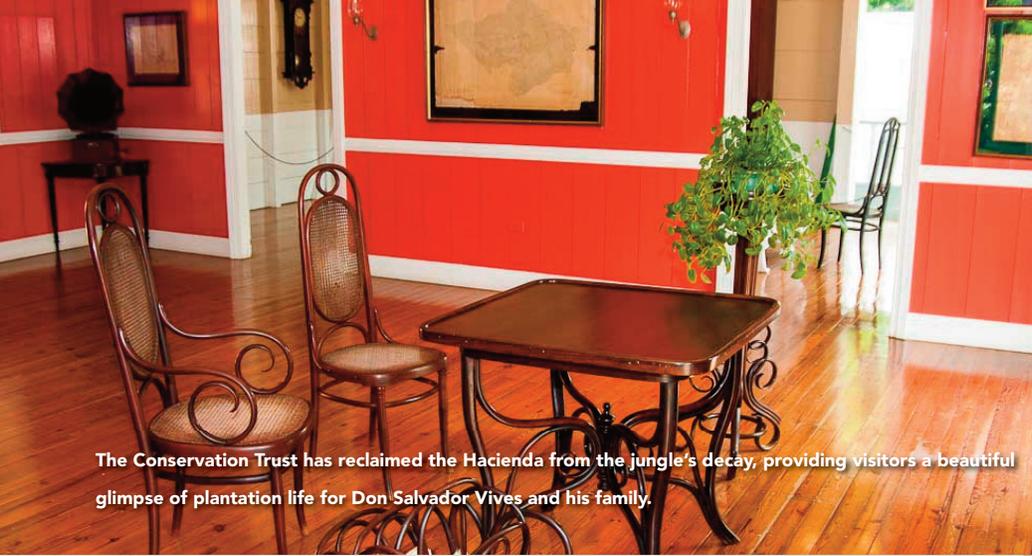
when one hears the pops made by cooking beans. Between the sounds of roasting and the aromas of cooking, the roaster decides to produce a milder, more aromatic finish (Café Americano), or a darker, richer caramel which yields a more bitter taste (French Roast). Artistry, indeed! Never had a cup of coffee seemed more complex, more in the moment, or more satisfying.

Looking back, what we found interesting at Buena Vista was the application of mechanical leverage to agricultural process. Water rights in Puerto Rico were communal—Vives had to get permission from the colonial authorities to use the Canas' water. The Buena Vista water rights required Vives return the water he diverted, and return it “cleaned” of productive by-product. What a concept

stages of development to more than 300 tons by the end of the 19th century, all without choking off downstream neighbors. Ingenious.

Before the Buena Vista water wheel empowered coffee production, it drove the corn mill. Morphing economics of the times required that the mill give way to coffee production. But Vivas did not abandon production of corn flours—he simply relocated the mill and tapped a new hydro power source to turn two 500-pound millstones—subterranean water flows driving an underground water turbine. Paddles in a stream 30 feet underground turned a shaft connected to gearing in the millhouse that turned one wheel against another. Dried corn poured in from above came out and was bagged as corn meal. This use of hydro power was rare; its restoration and preserva-

early 20th century, well on its way to rotting into a consuming jungle, a victim of natural disasters, changing production processes and killer economic times. In fact, Puerto Rico, an island of relatively small dimension blessed with a dense population but burdened by overdevelopment, had little of its land, history, culture or biodiversity set aside for conservation or preservation, much less restoration. The Conservation Trust of Puerto Rico (Fidicomiso de Conservación de PR), a brainchild of Steward Udall 50 years ago, was created by Congress to ameliorate this challenge. Since its founding in 1970, the Trust has taken on the job of identifying, acquiring and, where funds permit, restoring environmentally sensitive properties in Puerto Rico. Fortunately, the Vives' Hacienda Buena Vista in one such property. In process



The Conservation Trust has reclaimed the Hacienda from the jungle's decay, providing visitors a beautiful glimpse of plantation life for Don Salvador Vives and his family.



Therel Santos Diaz shares some of the history of Buena Vista. The Trust "interpreters" (guides) are fully knowledgeable about the period, the history and the restoration.

for 20 years, the restoration of this plantation was based on meticulous research, detailed artisanal effort, and a carefully calibrated commitment to the property's provenance. The classic beauty of the restored Manor House speaks eloquently to the Trust's success in its mission. As we walked through the neatly detailed family rooms, we felt transported to a time and way of life now gone for some 150 years. Gone, but not lost.

We came to the Hacienda Buena Vista through the Conservation Trust's specialized Eco-Detour program, a customized and highly personalized "vacation from daily living" designed by Trust naturalists (the Trust calls them "interpreters" of the space) for individuals or groups. Additionally, the Trust does special educational programs for schools and others seeking

Interested in Your Personal Eco-Detour?

The Conservation Trust of Puerto Rico, a private, non-profit organization founded to acquire, preserve and restore ecologically and historically significant sites in Puerto Rico, sponsors a very limited number of "Eco-Detours," uniquely designed discovery programs for individuals and small groups interested in an in-depth exploration of one or more of the Trust's properties (for example, the Hacienda Buena Vista coffee plantation or the Hacienda Esperanza sugar plantation). Itineraries are custom designed for each group. All arrangements are made by Trust guides to the client's specifications. Explorers are picked up in and returned to San Juan (or another embarkation point) as desired. All expenses are included. For details, contact Therel Santos or Christine Hernandez through the Conservation Trust. 787-722-5834 www.fideicomiso.org

to get in touch with the history, culture and ecological systems of this extraordinary island. Our experience was particularly rich because our local interpreter was especially knowledgeable about the property and our overall trip coordinators were so good at

If You Go

Interesting Hotels in Old San Juan

Ei Convento Hotel

(Historic Hotels of America, AAA Four Diamond) 787-723-9020
www.elconvento.com

Hotel Casa Blanca

(Stylish, comfortable and well located) 787-725-3436
www.hotelcasablancapr.com

La Cancha Beach Resort

(Chic, hip, retro, beachfront) 787-721-8500
www.laconcharesort.com

Interesting Dining

St. Germain Bistro & Café

(Quaint, soothing, quality food) 787-725-5830
www.stgermainpr.com

Il Perugino

(Elegant Italian, nice wine pairings) 787-722-5481

El Jibarito

(Comida criolla, traditional classics) 787-725-8375

making the experience a joy. We had only a day, but what a day! If you are curious about plantation life and enjoy a great cup of coffee, call Therel Santos Díaz at the Trust. He'll hook you up and brew up a much-prized cup of Puerto Rican coffee. ☕