





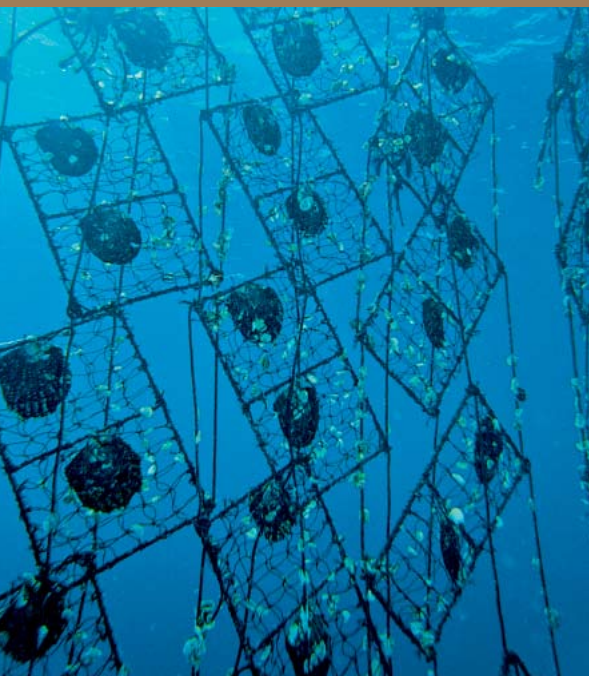
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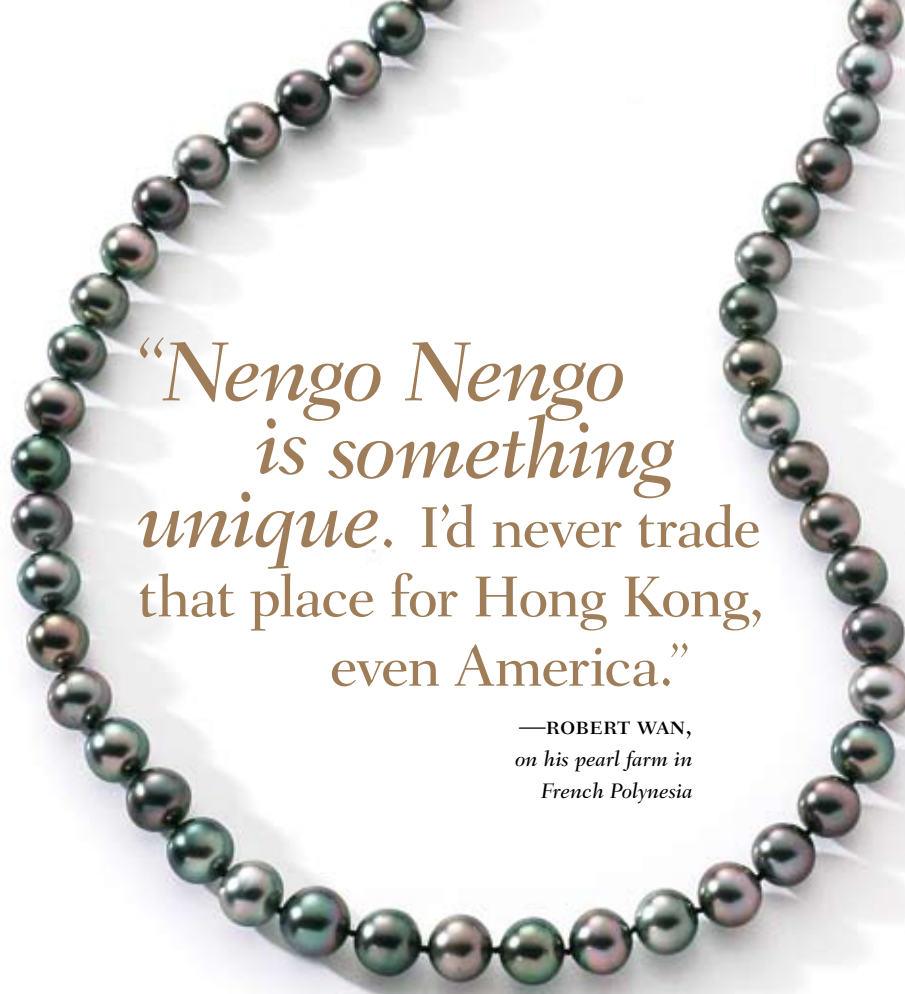
French Polynesia's native black-lipped oysters produce a rainbow of luminous gems—with a little help from man. BY LAURIE KAHLE



TO REACH THE ISLAND of Nengo Nengo, one of Robert Wan's seven French Polynesian pearl farms, we fly southeast from Tahiti's capital of Papeete for 530 miles over the South Pacific. Nengo is among the 120 islands and atolls scattered across an area the size of Europe that compose French Polynesia. After a few hours, the propeller plane descends to a sand airstrip on a scrubby spit of land surrounding the turquoise lagoon that nurtures Wan's prized *Pinctada margaritifera* var. *cumingi* oysters. The black-lipped species produces Tahitian pearls in a palette of 26 different base hues ranging from black and silver to chocolate brown and pistachio green. (The Gemological Institute of America [GIA] does not use the term *Tahitian pearl*, because it cannot verify a particular gem's specific location of origin. Instead it classifies them all as "natural color black pearls.")

Forces of Nature





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—ROBERT WAN,
*on his pearl farm in
French Polynesia*

Our small group includes Wan’s son Bruno, who oversees pearl production for the company, a few additional Robert Wan staff members, and Sonny Sethi, CEO of New York City pearl dealer and jewelry maker Tara & Sons. After we disembark to tour the farm, the crew unloads provisions for the farm’s dozens of workers. Then they refill the plane’s fuel tank from drums stored on the island and set off on the next 500-mile leg of their supply run, to Wan’s crown-jewel farm at Marutea Sud.

In 1984, Wan acquired the Marutea Sud farm from Jean-Claude Brouillet, another pioneer of the French Polynesian pearl industry who, like Wan, began cultivating pearls here in the mid-1970s. Brouillet decided to sell the farm after two devastating cyclones had struck the island. Marutea Sud’s pristine waters produce the largest, most radiant Tahitian pearls; experts can distinguish them from gems grown elsewhere in French Polynesia. “It is a unique island for pearls,” explains 73-year-old Wan during a meeting in his Hong Kong showroom a week after we visited Nengo Nengo. “The lagoon is very, very rich in plankton, and there are deep mineral concentrations from the bottom. The process is the same, but pearls from Marutea are better than those from Gambier and other islands. The shells are bigger in

Marutea, so you can implant a bigger nucleus. They just grow differently—like a Norwegian grows taller than an Italian.” He chuckles and adds, “Nengo Nengo is also something unique. I’d never trade that place for Hong Kong, even America.”

Workers on Nengo Nengo and Marutea Sud live a farmer’s life. It revolves around cycles of planting (or grafting, on a pearl farm), cultivating, and harvesting. The workday begins at dawn, and nightlife is nonexistent because the electricity generators shut down in the early evening hours.

The quality of a crop depends on a confluence of favorable factors including the health of the oysters, the quality and quantity of food in the lagoon, water purity and temperature, and, of course, weather; one cyclone can wipe out an entire harvest. When forecasts call for a storm, farmers move their oysters to deeper waters; they transport them to cooler waters if the temperature rises above the optimal level of 75 to 79 degrees. The farm workers regularly clean the shells to keep the oysters healthy, growing, and, most importantly, secreting layers of nacre, the calcium carbonate material that coats an implanted nucleus to form a pearl. Pearl producers have to be more patient than other farmers because their crop requires an investment of years rather than months.

Life on Robert Wan’s remote private island pearl farms of Nengo Nengo and Marutea Sud (opposite) revolve around cycles of grafting, cultivating, and harvesting.



PATIENCE IS NOT ONE of Sonny Sethi's most obvious virtues, but the energetic 49-year-old will wait as long as necessary to acquire the finest pearls. Sethi, who looks rather hip with his bald head and triangular soul patch under his lip, has spent more than three years assembling a single necklace of exceptionally rare 14 mm to 17.5 mm (in diameter), gem-grade, peacock-colored Tahitian pearls.

Sethi journeys to French Polynesia and Hong Kong each March and September to meet with his network of dealers, including Wan. At these meetings and at the Hong Kong auctions held by Robert Wan and Paspaley, an Australian producer of fine South Sea pearls, Sethi builds his inventory. With these pearls, he supplies retailers and Fifth Avenue jewelry houses and produces his own jewelry. Sethi sells the jewelry under the brand Tara, which is the Sanskrit word for "star" and the name of his father. Tara Sethi, a native of New Delhi, founded Tara & Sons in 1974. Today the company employs five family members including Sonny's brothers, Anil and Deepak.

At nearly every appointment in Papeete and Hong Kong, Sethi pulls out a jewelry form that holds his *crème de la crème* Tahitian pearls in the shape of a necklace. A number of spaces remain, awaiting gems that match the size, color, and luster of the others. With each buying trip, the pearls he needs to complete his necklace have become more elusive—and more expensive. Initially, Sethi would not purchase any pearl smaller than 15 mm, but he has since reduced his minimum to 14 mm. "After three years, my dream is still not complete," says Sethi, frustrated by the knowledge that many of his suppliers are holding suitable specimens in their private collections but will not release them because they are so precious. "A friend in the business once said to me, 'You'll never finish it. Sell me the pearls!'"

As Sethi sorts through the inventory at Poe Black Pearl,

which occupies a modest office above a Papeete shopping mall, general manager Loïc Wiart explains why such gems are so difficult to produce. "The problem with large sizes, from 14 mm to 17 mm, is that they represent the second or third grafting," says Wiart, "so the shell is older and near the end of its productive life, and luster is usually low.

"It's very difficult to find this size and luster," he adds in reference to Sethi's pearls. "The quality is perfect, no spots at all, and the peacock color exhibits a little green halo around the periphery and a reddish cast at the center."

Although he finds no gems for his necklace, Sethi acquires about 650 pearls of various sizes and colors for his collection, which is sold at Borsheim's in Omaha, Neb., and at the Lux Bond & Green stores in Connecticut and Massachusetts.

Upstairs from Poe, at Tahiti Rava Rava Pearl—which, with its inventory of about 1.2 million pearls, is one of Tahiti's largest dealers—company president Philippe Chénne shakes his head when Sethi presents his incomplete strand. Chénne echoes the sentiment that gems of such quality and size are virtually unheard of. "Only Robert Wan can produce such good luster at that size," he says. "It's because of the condition of the water and low production numbers."

Chénne, displaying a quiet reserve, is impervious to Sethi's coaxing banter, and it quickly becomes evident that Sethi will not be adding any gems to his necklace from Chénne's personal stash. Then Chénne's staff rolls in carts loaded with plastic bins, each containing different quantities of smaller pearls in a variety of colors, as well as trays holding necklace strands of large-size gems. Each bin is labeled with the weight of the lot, the number of pearls, size ranges, and quality grades—A through D.

Sethi picks up a bin that catches his eye, spreads the few hundred multicolored pearls on the table, then rapidly

Unpolluted, nutrient-rich lagoons like Wan's (above) are essential for producing high-quality pearls.

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plucks out a dozen or more of the best specimens with matching colors. One at a time, he rolls several of the pearls back and forth with his thumb along the track formed by his index and middle fingers, assessing the shape for roundness and the skin for blemishes. “The best time in my office is when I am playing with the pearls at around 4 pm,” says Sethi. “By that time I’m burned out.”

Sethi readies his calculator to determine whether the asking price is agreeable and to calculate a counteroffer if the price seems high. “If I’m far off the asking price, I don’t even make an offer,” he says of his buying strategy. “If the price is below what I expect, I just take it without negotiating.”

But in meeting after meeting, Sethi is surprised at what he says are rapidly escalating prices. Still, Tahitian pearl prices are not even close to their 1980s peak, when, according to Wan, a necklace now valued at \$200,000 could command \$500,000. During the 1990s, the industry suffered from a lack of regulation and, more significantly, economic troubles in Japan, a key market.

In 2000, the French Polynesian government instituted

regulations that require Tahitian pearls’ nacre coatings to be at least 0.8 mm thick, though the average coating of a Tahitian pearl is 0.11 mm thick. (The length of time the oyster spends in the water after grafting and the animal’s health determine a pearl’s nacre thickness.) Each day, a government agency in Papeete uses machines to test approximately 60,000 pearls before they are allowed to leave the country, either for permanent exportation or even temporarily for trade fairs or auctions. If a pearl does not meet the standard, it is destroyed at the producer’s expense. According to the French Polynesian government, the country’s pearl production has decreased 20 percent over the last five years, while the overall value of the pearls harvested has increased by as much as 40 percent because of such quality and production controls.

Robert Wan commands more than 90 percent of the market for premium Tahitian gems measuring 12 mm and larger. While entering the company’s Papeete headquarters prior to last March’s Hong Kong auction, Sethi acknowledges that the opportunity to preview Wan’s offerings is a

To complete this exceptional strand, Tara & Sons’ Sonny Sethi spent more than three years seeking the right peacock-colored pearls.

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privilege resulting from his long-standing partnership. “Not anyone can just walk in to buy,” he says, unless, of course, it is in Wan’s retail store on the ground floor.

The preview allows Sethi to have first pick of the latest harvest—one that bears fruit for him. Grinning, he holds up a match for his necklace. The next day, Sethi and the rest of our group take off on Wan’s private plane for a preplanned visit to Nengo Nengo, to learn how such gems are cultivated.

AFTER WE LAND ON Nengo Nengo, the farm’s managers take us to a crude, cement-block building on the shore of the lagoon, where a grafter is prepared to demonstrate the harvesting and grafting process. Sitting at a wooden table that holds implements that look like surgical tools, the grafter waits while an assistant places an oyster into a metal stand and pries it open. He then uses a pair of long tweezers to retrieve quickly and fluidly a finished pearl, which he plops into a small glass dish filled with water. Then he inserts into the animal’s reproductive organs a beadlike nucleus and a small piece of tissue from the mantle (the part of the oyster that secretes nacre) of another oyster, which is referred to as the donor oyster. The cells from the donor oyster develop around the nucleus to form a pearl sack in which the gem grows. Those cells also can influence the color of the resulting pearl.

At harvest time, if the animal proves capable of producing a quality gem, it is grafted again with a larger nucleus to produce a bigger and more valuable pearl. The third graft is the last; by this time the oyster is about 9 years old and at the end of its productive life.

The nucleus is made from the shell of a Mississippi River mollusk, which is similar to that of a pearl oyster; still there is about a 30 percent chance of rejection. Of 1,000 grafted oysters, approximately 700 animals will retain the nucleus and start coating it with nacre—10 to 20 layers per day, with each layer measuring about 1 micron (a millionth of a meter) thick. According to Wan, after two years, some 500 pearls are harvested, only half of which have commercial value, and only about 20 are considered gem quality.

Before proceeding, we change into bathing suits. The attire might be atypical for a factory tour, but this is not a typical factory. Suitably dressed, we board a small motorboat for a ride around the lagoon that nurtures the oysters from birth.

When the water temperature changes in spring and fall, the *Pinctada margaritifera* oysters spawn, releasing eggs and sperm into the water. The fertilized eggs produce larvae that grow into spat, or baby oysters, which attach themselves

to shelters, where they mature. Pearl farmers place wire collectors in the lagoons to attract the young oysters, and at 10 months, workers remove them from the collectors and establish breeding stations, placing the animals in underwater baskets, where they grow for two more years. During this phase, the young oysters are separated from each other and submersed to depths of more than 50 feet.

One of the keys to breeding healthy oysters is keeping them clean. Our boat slowly sidles up to a farm boat on which workers are pulling up the oysters to remove any seaweed, shells, or other mollusks that have accumulated on their shells and compete with them for food. Every three to six months, each oyster is removed from the water and brought on board a boat such as this, where it is individually processed through a Japanese-invented machine. Cleaning takes place on the water so that the animal can be resubmerged within minutes.



From here, we motor to a channel that Wan had blasted through the reef to allow water from the open ocean to flow in and out of the lagoon, cleansing the water and providing a steady food supply for the oysters. This expensive alteration to the natural land configuration, says Wan’s son Bruno, is one of the factors that contribute to the superior quality of Robert Wan pearls.

We climb off the boat and onto the slippery reef. Then we jump into the rushing channel for a snorkeling thrill ride that sweeps us along the reef walls, which host an abundance of marine life. Later we learn that this is a favorite feeding place for sharks.

Once back on the beach, we sit down for a lunch that includes fried oyster cakes—the animals are hardly rewarded for their life’s work. When no longer useful for producing gems, oysters may be cooked for a meal or their shells may be used for decorations, or, at Robert Wan, to produce a line of beauty products called Nacr.

Despite all their intervention, French Polynesian pearl producers must wait for years while nature takes its course. Though the farmers can influence many factors, the animal ultimately produces what it will, which only adds to the excitement of the harvest.

At Robert Wan’s Papeete office prior to the visit to Nengo Nengo, Sethi had negotiated with Miranda, Wan’s daughter, for the gem that would bring him one pearl closer to finishing his ultimate Tahitian necklace. He also inquired about a long strand of irregular-shaped baroque pearls, which are becoming more popular. When asked how the unusual baroque shapes are formed, Miranda laughed and said, “I don’t know. You have to ask the oyster.”

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