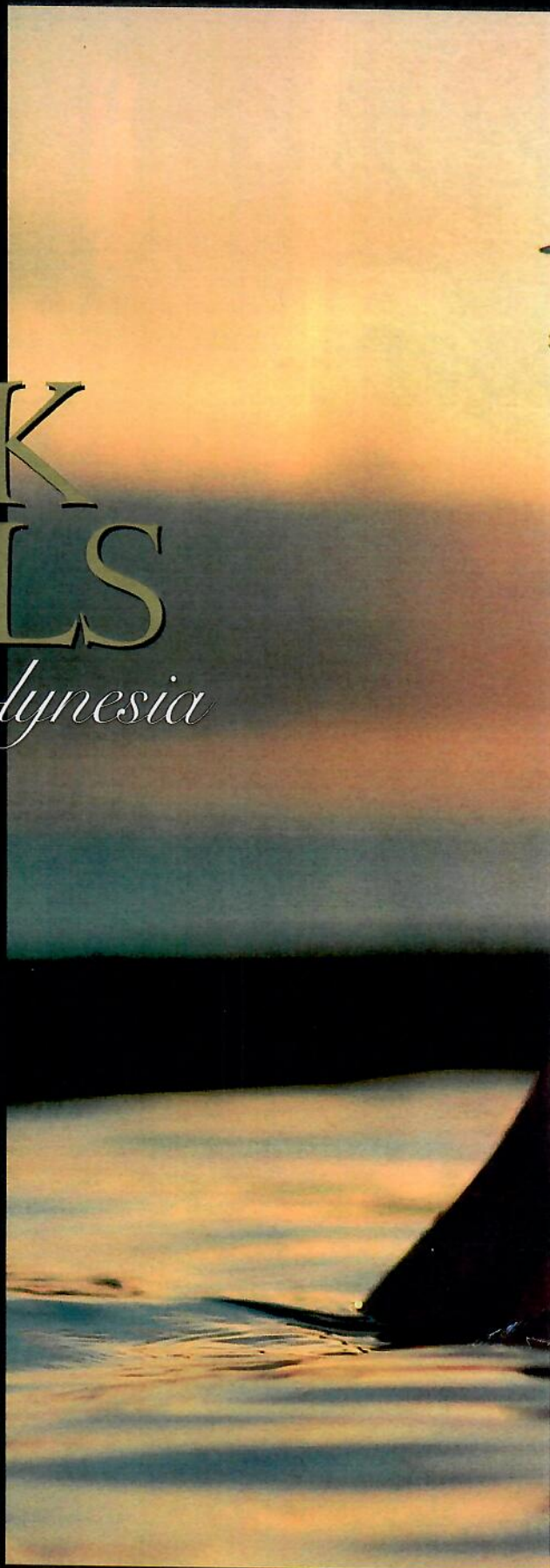


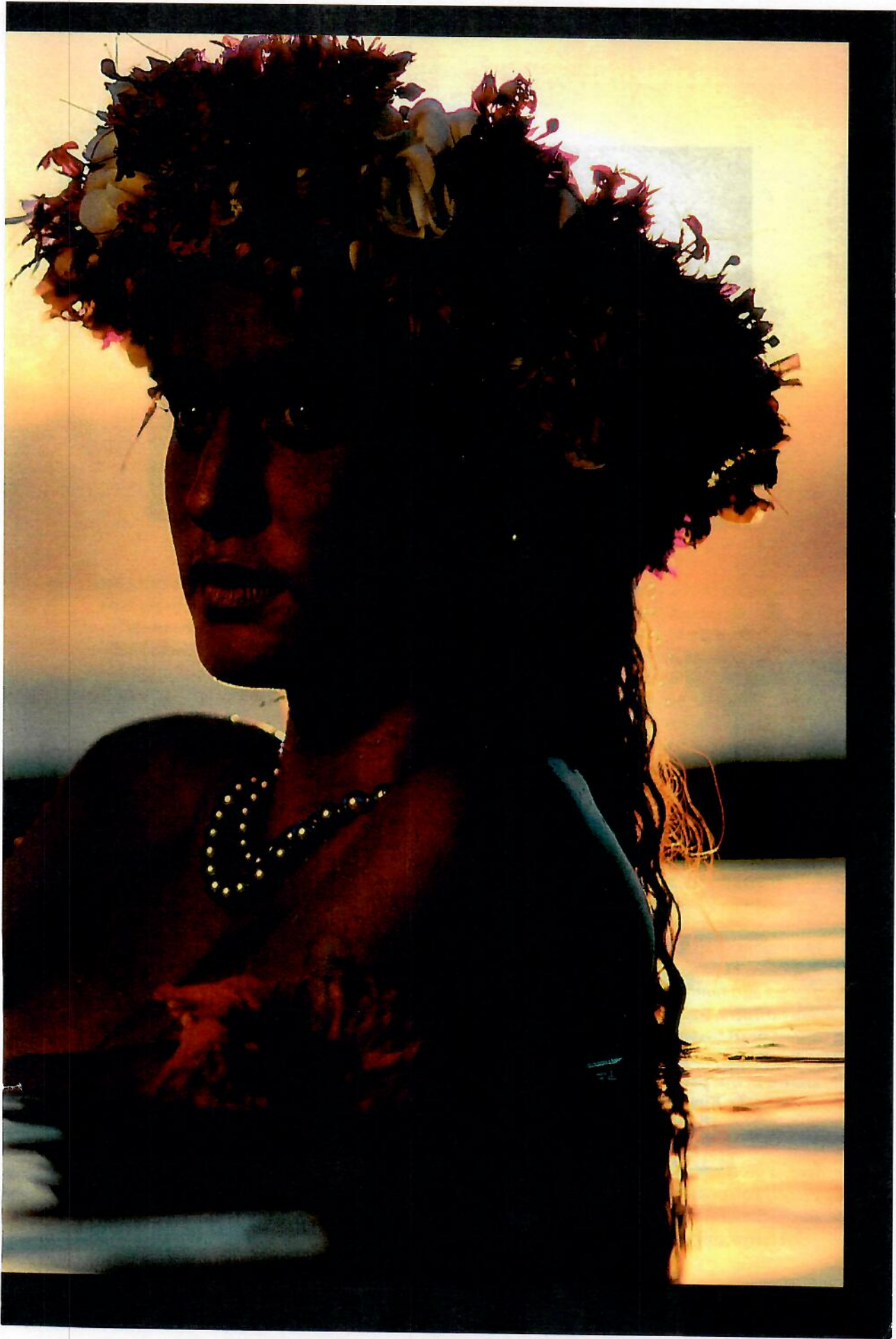
# BLACK PEARLS

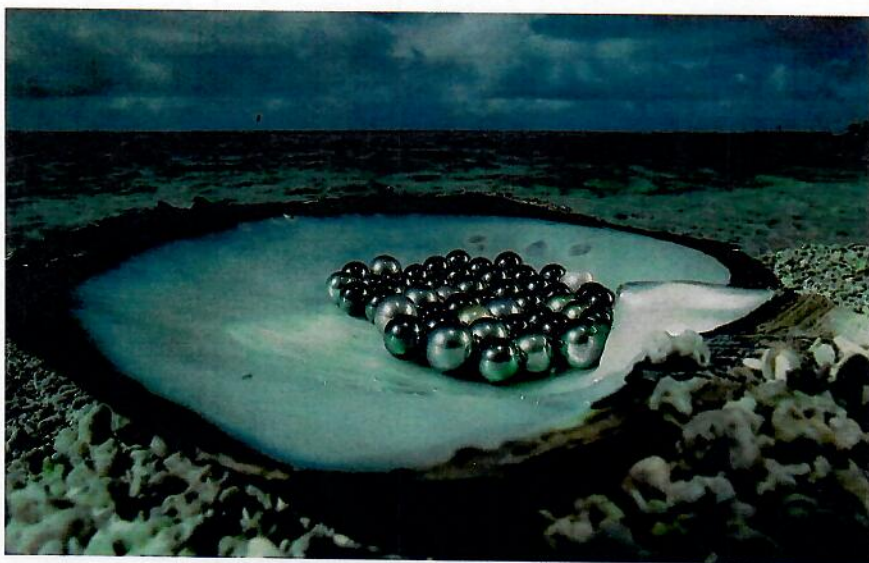
*of French Polynesia*

Awash in a Tahitian evening, Heiata Roomataroa seems lost in a trance of pearls and golden light. Luminous against her skin, her necklace—two strands of black pearls worth two hundred thousand dollars—holds and reflects the magic of the Polynesian seas. Such pearls are not accidental gifts from the sea. They are the product of a complicated partnership between humans and oysters, spawned in azure lagoons amid the distant atolls of the South Pacific.

ARTICLE AND  
PHOTOGRAPHS BY  
DAVID DOUBILET







**R**oused by the whine of aircraft engines, I awake to a dream beneath my wing: The Tuamotu Archipelago is strewn across the empty sea like a string of bright pearls. They are atolls, coral crowns on the rims of ancient volcanoes outlined in breaking surf (opposite).

The Tuamotus are made up of two mountainous islands and 76 atolls. Each atoll traps and holds a piece of ocean, a lagoon that acts like a giant soup tureen for plankton. The lagoons also protect and nourish *Pinctada margaritifera*, the black-lipped pearl oyster.

I'm flying to meet a man known in this part of the world as the King of Pearls, Robert Wan. His company, Tahiti Perles, is by far the largest producer of pearls in French Polynesia. Scattered across the Tuamotus, his pearl farms are perhaps the

best place on earth to see the intricate process of culturing pearls.

We land on the island of Marutea after a three-hour, 950-mile flight from Tahiti. It is noon, and the light is painfully white. There to meet me is the King of Pearls himself, a quiet, courteous man in a T-shirt, khaki shorts, and rubber thong sandals.

"End of the world," he laughs. "Everything from generators to soy sauce has to be brought in." Later, as he guides me through his farms, we talk of pearls.

"This black pearl oyster of ours," he says, "is four times the size of the Japanese *akoya* pearl oyster, which produces most of the pearls in the world."

Black pearls are rarer, thicker, and bigger, he tells me. They are also richer in orient, the reflection of light beneath the surface of the pearl. And then there are the

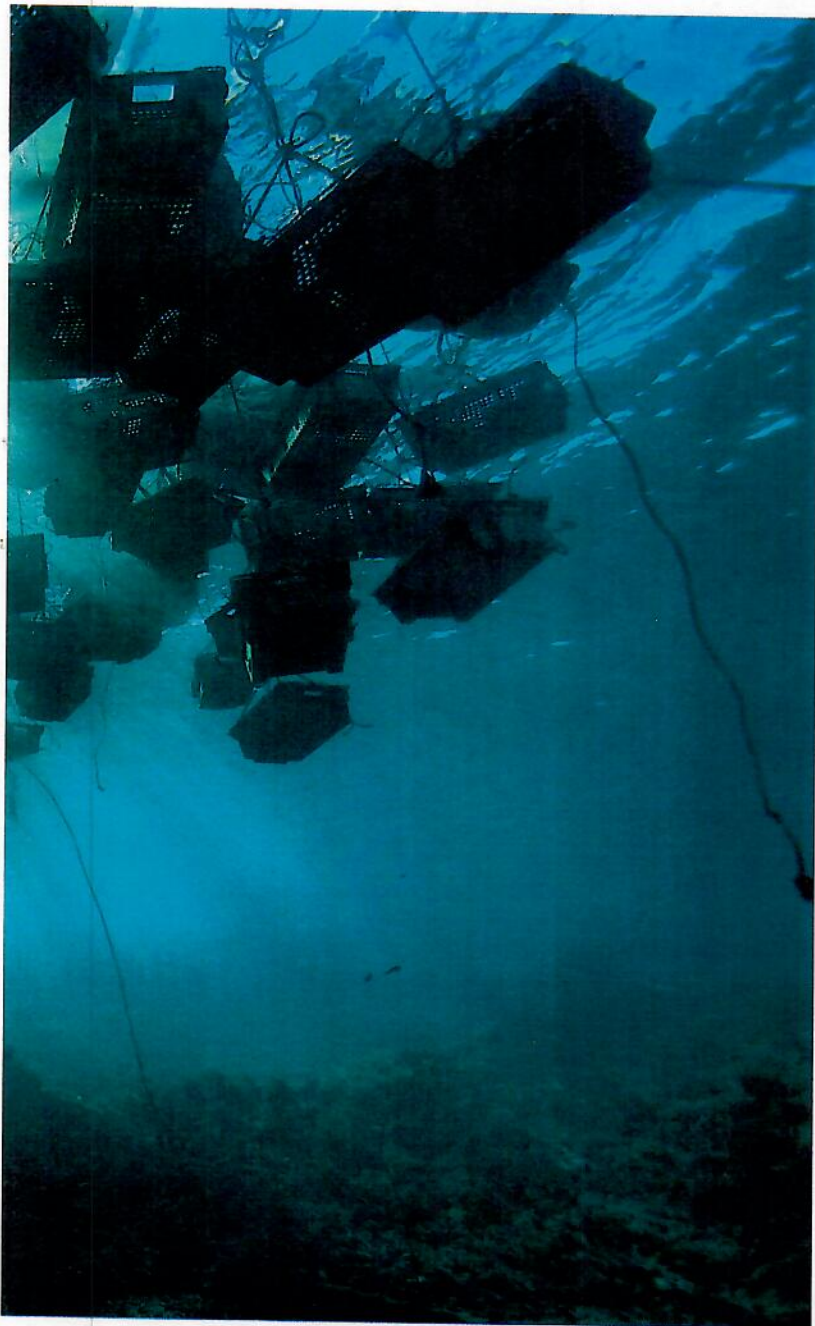
colors (above)—silver gray, obsidian—sometimes even white. "The green ones," he beams, "peacocks I call them—we raised in the cooler waters of the Gambier Islands south of here."

In his lagoons the oysters act as barometers, registering the health of their environment. When the lagoon declines, so do the oysters; they require temperatures of about 75°F and clear, unpolluted water.

Most Japanese oysters are maricultured, Wan tells me, born in a hatchery where egg and sperm are artificially combined. But here in the Tuamotus, the lagoon is the true parent of the oysters, which spawn naturally.

The egg and sperm drift as the lagoon rises and falls with the tide, then combine to produce a larva. This is French Polynesia, after all, where even oysters begin life with a touch of romance.





At the turn of the century the pearl fisheries of Polynesia harvested oysters just for the iridescent inner shell, mother-of-pearl for the world's buttons. Back then a pearl was an exotic windfall. Today nearly every pearl on the world market is cultured, grown by man.

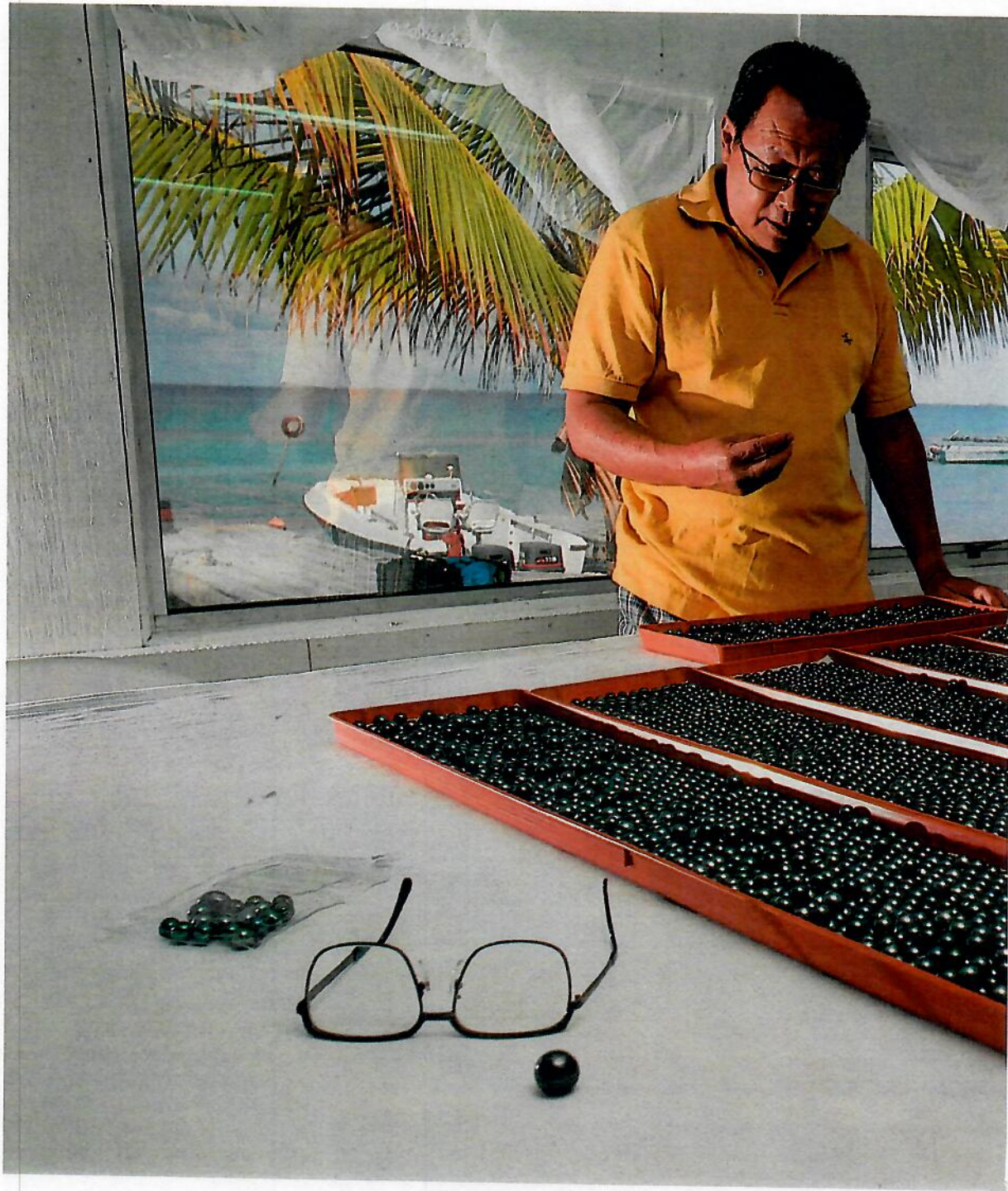
At another of Wan's farms, I marveled at the pearl farmers' ingenuity. They use plastic garlands suspended in the lagoon to provide an anchorage for the drifting pinhead-size larvae. In a few months each garland is choked with little oysters (bottom far left), which soon grow to the size of silver dollars. At six months the oysters are placed in hanging baskets (left), where they grow for another year and a half.

Then the oysters are removed and wedged open, one by one. With surgical precision, grafting operator Tsunoda Kunitoshi (bottom center) makes a slit with a scalpel near the oyster's gonad and inserts a snippet of mantle tissue, followed by a nucleus (bottom right)—a bead carved from the shell of an American freshwater mussel.

The mantle tissue forms a sac where nacre—the pearlescent substance that coats the nucleus to form a pearl—is generated.

After surgery the oysters are returned to the lagoon. In three years the pearls will be ready to harvest.





**T**he May harvest is over, and Robert Wan appraises the results—thousands of gleaming black pearls in his sorting room on Marutea, each plucked from the maw of an oyster (left). They will be graded for



quality, then sold in the United States, Europe, and Japan. In 1996 French Polynesia exported a million pearls, worth 140 million dollars. More than half came from Wan's operation. The rest came from 500 other farms throughout Polynesia. Some

farms are large, but many are little more than a boat, a few lines of oysters, a scuba tank, a shed, maybe a dog.

"Look at this," says the King of Pearls, setting one next to his glasses (above). "Our biggest round pearl, 21 millimeters. From our farm

on Nengonengo." He smiles, and I see the dream reflected in his eyes: atolls of pearls, shining in the bright Pacific. □

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DAVID DOUBILET made his first underwater photographs off the New Jersey shore at age 12. In his 42 GEOGRAPHIC stories he has covered the world's major seas.

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