



RULE #27

RED IS THE NEW GREEN

Cuba has the Caribbean's largest wetlands and earth's happiest lobsters, but is Fortress Fidel really an environmental paradise? **PATRICK SYMMES** heads south and finds that bold policies combined with bolder incompetence can result in surprising successes — and spectacular brown failures.

THE KEY TO A GOOD TRIP is of course a bad start. So things began looking up for me in Cuba late on my fourth night, when I was ambushed by two young men. They smashed me against the door of my guesthouse, grabbed my wallet, and took off sprinting.

I went after them. Nobody has a gun in Havana, or practically anything sharper than a butter knife, so this isn't quite as stupid as it sounds. I ran hard, chasing them through the quiet city center, screaming for help. After a block I kicked off my flip-flops and started closing the gap, but it was too late. The boys leaped onto their escape vehicle, a Flying Pigeon, one of the 1.2 million bicycles imported from China in the early 1990s, part of Cuba's move away from fossil fuels toward nonpolluting transport. The Flying Pigeon weighs about 55 pounds, but we were headed downhill now, past the University of Havana, and with one boy pedaling and the other standing on the pegs, they squeaked into the night.

For the next two weeks, things just kept getting better. I went scuba diving and blew out my eardrum. A guy dropped an air tank on my foot. The bloody, four-inch scrape on my left arm, souvenir of the mugging, turned green and filled with pus. I was bitten by a crab, rafts of mosquitoes, and two dozen sand mites. Although I'd come here to measure Cuba's environmental situation in the twilight of Fidel's reign, many of the greens I was looking for were in hiding, or jail, or exile. People kept whispering that everything was a lie. I looked up an old friend; he'd become an alcoholic. It was June, and even the weather was bad: windless, humid, and blistering.

Ah, Cuba, mi amor. Dreams are duty-free, imported with our carry-on bags; disillusionment is the national export. We bring the paradise, Cuba supplies the music and mojitos, the good scuba diving, the confounding moral examples, the surprisingly intact ecosystems, and—ouch!—a quick and bloody mugging, all accomplished with amazingly bad equipment.

This was my lucky 13th visit. Things may start off badly, but in Cuba the future is always glorious. No matter how much they beat on me, I will say it again: Everything is splendid in Cuba. Don't believe otherwise, no matter what I tell you.

THERE IS ONLY ONE country on earth that is truly, deeply, accidentally green. In 2006, the World Wildlife Fund did the global math, cross-indexing social factors like education and life expectancy with

each population's ecological footprint and global biocapacity. The poor countries were huddled on the left, underdeveloped. The rich soared up to the right, over-consuming. Out of the 150 nations studied, only here, in the rigidly ruled kingdom of Dr. Castro, were human beings developing at a statistically sustainable rate.

WWF isn't alone in concluding that Cuba is doing something right. The United Nations lists it as one of the only countries in the Caribbean that have stopped and even reversed deforestation, with 22 percent of the island covered in everything from palms and pines to mangroves and ceiba trees. Fidel Castro has declared himself the island's chief ecologist, intervening in everything from the design of lobster boats (he added live wells, to ensure that juveniles return to the sea still kicking) to the retrofitting of sugar mills (to run on bagasse, the biomass left behind by the sugar harvest). He ordered the planting of 348 million trees in the 1960s, and as recently as 2007 Cuba claimed it would put 135 million more in the ground. At the Rio Earth Summit, in 1992, Fidel received rapturous applause as a prophet of low-consumption ethics, even as George H.W. Bush was criticized for ignoring both him and the resulting treaties.

Since then, Cuba's national assembly has enshrined sustainable development in the constitution, designated 20 percent of the country for conservation, and

Caribbean, with perhaps half of her 20,808 known terrestrial species found nowhere else. Its seas are like no other: The northern coast stretches in a bow almost 1,000 miles long, with crystalline waters, blue holes, and some 1,000 barrier islands barely fathomed since Hemingway sent his U-boat hunters stalking their channels in *Islands in the Stream*. In the south, nutrients well up from the 25,000-foot-deep Cayman Trench, enriching a 70-mile-wide continental shelf. As much as 50 percent of Cuba's southern coast is healthy red and black mangrove forest, the largest such forest—and fish nursery—in the Caribbean. Its 2,200-square-mile Zapata Swamp is the Caribbean's largest wetland, home to 900 plant species, and its reefs are intact to a standard unknown elsewhere in the region.

Hold on a minute: Cuba? For as long as I've been reporting on the island—15 years now—I've listened skeptically to declarations about Cuba's ecological achievements that seemed to defy the brown reality I saw on the ground. Eurogreen Web sites trumpet wind farms; I found the beaches of the north coast stained with tar from a low-tech, mismanaged oil industry. The head of the Center for Cuban Studies, in New York, told me how organic gardening was greening Havana; in the countryside, I found crude state agriculture despoiling the earth. The United Nations gave biosphere status to

THERE CAN BE NO DOUBT that something genuinely important is happening in Cuba. If you think you know the Caribbean, THINK AGAIN. CUBA IS THE CARIBBEAN.

organized an islandwide drive to install fluorescent lightbulbs and rip out old electricity-sucking refrigerators. When Castro learned that spearfishing was damaging the Jardines de la Reina national park, an 830-square-mile archipelago in Cuba's south, he simply banned it—even though spearfishing there was his favorite relaxation.

There can be no question that something genuinely important is now at stake in Cuba. If you think you know the Caribbean, think again. Cuba is the Caribbean: It contains nearly half the landmass (ten times that of Jamaica) and a third of the population (11 million people) in that round sea. And in a region stressed by development, habitat loss, overfishing, and low environmental standards, Cuba retains the richest biodiversity in the

a wildlife reserve in the Pinar del Rio province surrounding an "eco-village" called Las Terrazas; this turned out to be mostly some phony thatched huts and a sandwich shop used by tour buses.

If the present is dubious, the future may be worse. After nearly five decades of Castro and a collective 12 years of Bush, regime change is the new reality. Now 81, Fidel is on life support; his 70-year-old brother Raúl is in the wings; and presidential candidates from Barack Obama to John McCain have spoken cautiously of a new beginning with Cuba. Lifting the U.S. embargo would send millions of American tourists and billions of investment dollars flooding into Cuba, turning pristine coastline into—well, think Ayn Rand with a cement mixer. Cubans today are hungry and cash-starved, but tightly controlled;

a sudden collapse of the country's political system would unleash them—and foreign investors—on the forests and seas.

In Cuba, facile lessons are abundant (Michael Moore, call your doctor!), but even a jaded visitor like me has to acknowledge that a particular mix of Cuban factors—utter economic incompetence, visionary green policies, and a dash of red brutality—has conspired to deliver the big island into the 21st century with an almost 19th-century set of natural assets. This success comes with a question: Is it possible that Cuba, a deliberate refutation of the consumer-crazed, gas-guzzling, climate-warming American way of life, might someday offer us genuine alternatives? If Supertanker America strikes a reef, wouldn't we need some quick lessons from a neighbor about urban gardening, low-impact living, and fitting two guys onto one bicycle?

ASIDE FROM BEING the worst divemaster I've ever encountered, the guide who led us into the deep waters off Cuba's western tip was also a *hobo*. A *hobo* is a cherished Cuban type, someone who is deliberately, defiantly, entertainingly full of it. In this case the divemaster was a laughing complainer who evaded all our questions, skipped the safety briefing entirely so he could smoke a cigarette, didn't bother telling us where we were going, and said of the marine life we might encounter under the surface, "Fishes we will discuss later." He also looked ridiculous in his pseudo-Speedo.

But the water ...ah, the water. River

me said. He was a blond New Zealander in his twenties, named Ryan. He suggested we team up—something the divemaster hadn't bothered with—and we plunged downward, following the other divers as the shelf fell away into one of Cuba's steep walls, or veriles, an express ride to the bottom of the Caribbean.

The divemaster led us to a narrow crack in the sand, a kind of crevasse in the sea floor, and without looking back he and the others plunged in, with Ryan and me a distant last. The descent was almost vertical, the canyon walls tight and lined with long trees of black coral, one of the slowest-growing, most endangered of all corals. He hadn't mentioned that we were heading right into one of Cuba's most famous black coral formations, thousands of years of creeping progress now vulnerable to any flailing goofball in a wetsuit.

This old-growth forest seemed like an argument for Cuba's conservation policies—the global trade in black coral is restricted under Schedule II of the CITES treaty, precisely because it's been stripped from places like the Cayman Islands and the Yucatán. But back in Havana, I found pearls of the coral selling in the gift shop of the Havana Libre hotel for a dollar apiece. Cuba's government has allowed itself to do many things—like netting dolphins and selling them to global water parks, as it did in the 1990s—that would be condemned if done by private interests.

I managed to slide out of the canyon without crushing anything, but just as I came into open water, my left ear blew. I twisted, gasped, and forgot my buoyancy. I drifted down to 100 feet, alone but for Ryan, watching from afar. The pain



asked his name, he stalked off without comment. Accountability is not the Cuban way. As if to emphasize the point, a careless crewman slammed an oxygen tank onto my foot and grinned helplessly under my barrage of curses.

There is a lot of talk about what will happen when American tourists can visit Cuba, but the Europeans and Canadians are already here, 2.3 million of them a year, pouring roughly \$2 billion into the island, according to *The Economist*. Over the past ten years, Cuba has doubled the number of hotel rooms to 50,000, often bypassing environmental concerns in the process. On the hotel-strewn Varadero peninsula, two hours east of Havana, reserves of coconut palms have been bull-

IF SUPERTANKER AMERICA STRIKES A REEF, wouldn't we need some quick lessons from a neighbor on FITTING TWO GUYS ONTO ONE BICYCLE?

was taking me away from things—too deep, too unsafe, breathing too fast (oh, panic!)—but I closed my eyes and managed to correct my depth, following Ryan slowly along the wall, past ten-foot-long pencils of coral, tagging purple wrasses, and queen angelfish. An octopus peeked out from below a rock; huge coral jugs littered the wall, a healthy reef buzzing in an emerald-and-blue kingdom.

By the time we made it to the boat, the divemaster was already on the bridge, smoking. We never got a discussion of "the fishes," and back on land, when I

dozed to accommodate hotels. On the north coast, in 1988, the government rammed a 17-mile causeway through shallow bays to the pristine barrier island of Cayo Coco and then built a string of resorts with 3,000 hotel rooms. Dozens of species of birds and fish were damaged severely; across Cuba, biologists, archaeologists, fishermen, and dissidents told me that Cayo Coco was the spark for their green activism, the first time they saw the environment as a political problem. Today the causeway is dotted with police posts that turn away ordinary



sediments make diving off the beaches of eastern Cuba unimpressive, but here in the arid west, facing straight toward Cozumel at a small resort called María la Gorda, upwellings of clean water and marine life from the Cayman Trench create some of the best diving in the Caribbean. Every ripple of sand seemed just beyond reach, even though it was 30 feet away.

I quickly found myself in a bubble bath. My vest, regulator, and backup regulator were all streaming air. "All equipment leaks in Cuba, always," the diver next to



CRANKING OUT A TRADITIONAL "NUEVA TROVA" BEAT IN BARRACOA; LEFT, BATTER UP IN THE TOBACCO FIELDS OF PINAR DEL RIO; OPPOSITE, THE MARJA LA GORDA GOVEMASTER PREPARES FOR THE SAFETY BRIEF.

Cubans, the ultimate example of what Frommer's calls the "apartheid-like tourist sites" where foreigners languish at a remove from the island's reality.

María la Gorda—Fat Maria—was isolated by geography, price, policy. There were no Cuban guests at the little resort, which had a decent beach, nice cabins, and great sunsets. But the food was pathetic, a steam-table array of hot-dog salads, chicken à la defector, and oily fish, much of it recycled at breakfast. This is typical of Cuban resorts, in my experience at least, and explains why Cuba enjoys one of the lowest return rates in international tourism. Everything from aircraft landing fees, among the highest in the world, to a special tourist peso (expensive on the island, and worthless off it) makes travel outside the resorts difficult and slow.

Ryan sounded disillusioned. "We spent four days in Havana," he told me as we washed our equipment, "and we reckon that was four days too many." He imitated the cigar vendors and would-be pimps: "He-joe my fren' my fren' you wanna Habana cigar girlfren' mulatta negra rubia." He and his friends had liked Viñales, the tranquil tobacco country of the west, but this was the only spot they could love. The water was warmer than in New Zealand, and there were no hustlers, bureaucrats, or even Cubans under the waves.

TOURISM IN CUBA IS often run by the military. María la Gorda is operated by Gaviota S.A., Cuba's largest tourism company, itself a wholly owned subsidiary

OUTSIDE ONLINE

For an online gallery of the author's photographs, go to outsideonline.com/cuba



of the Revolutionary Armed Forces. The pilot of one sightseeing helicopter told me he'd learned his trade in a Soviet gunship in Afghanistan: my domestic flights were all on Gaviota planes, painted in bright yellows and tropical greens but listed on airport monitors as FAR, Fuerzas Armadas Revolucionarias. Through Gaviota, the military offers fishing expeditions, diving excursions, and trips to thermal baths, and all over Cuba, TransGaviota taxis can whisk you from Gaviota restaurants to Gaviota hotels stocked with Gaviota Hoteles Body Lotion.

At the bar of one such military-tourism complex, the Hotel Nacional, in Havana, I ran into Wayne Smith, a bearded exp-diplomat who was Jimmy Carter's man in Havana, heading the U.S. Interests Section, the closest thing our government has to an embassy here. Wearing a guayabera shirt, he was sitting in a wicker armchair on the back terrace of this stone palace. Musicians strolled past, as in the days

when Al Capone, Winston Churchill, and a pile of movie stars slept here.

Smith now directs the Cuba program for the Center for International Policy in Washington, D.C. He'd known Castro for decades, so I asked if El Comandante was really responsible for Cuba's green successes. "Who knows?" he said. "Fidel is a diver. But it is a very mixed record. Cuba has very strong policies in favor of the environment, but on an institutional level, when it is a question of development versus ecology, it slips through the cracks. What's it look like to you?"

The usual, I said: visionary declarations, and then chaos. He grunted. The Cuban environment was just like this hotel: museum more than refuge, protected and neglected, the state skimming off the top and excluding Cubans at the door.

David Guggenheim, an adviser to the Harte Research Institute for Gulf of Mexico Studies, recently told *The New York Times* that diving in Cuba was "like going back in time fifty years," and I'd assumed

THE AXIS OF ECO

The state of green under a few other unexpected regimes

LIBYA Last September, the former pariah state announced plans for the world's largest sustainable development—2,100 square miles of golf courses, hotels, and villas. The design, drawn up by British architects Foster + Partners, has all the requisite catchphrases—carbon-neutral, renewable energy, archaeological conservation—but will be built among coastal mountains that the World Wildlife Fund calls “one of the last ten paradises” of the Mediterranean.

NORTH KOREA A five-decade standoff has transformed the Korean Peninsula's heavily fortified DMZ into one of the world's most revitalized ecosystems, a refuge for rare species like the Asiatic black bear and the Eurasian lynx. Now, international advocates, including media mogul Ted Turner, are pressing both Koreas to declare the 155-mile-by-2.5-mile no-man's-land a peace park. Reclusive North Korea has shown little interest, but it may grant access to the International Crane Foundation to study the vulnerable white-rumped crane.

IRAN A maniacal push for nuclear power has often sidetracked Iran's efforts for alternative energy, but since creation of the Renewable Energy Organization of Iran in 1999, the country has been exploring green options like wind farms (with five under construction) and solar-energy plants (two in the works). The oil-rich nation has even turned to geothermal energy, with a 55-megawatt plant on volcanic Sabalan Mountain. By 2010, Iran hopes to produce more than 700 megawatts from renewable sources. —RYAN KROGG

as much as Maria la Gorda. But Smith wasn't having it: In the 1950s, he said, “You never went out without seeing schools of barracuda, sharks, clouds of fish.” Now, he said, “most of it's gone. People need the fish, the protein.”

That night, I tasted sustainable ocean policy for myself at La Divina Pastora, a restaurant in an old Spanish fortress across the harbor. Cuba uses holistic techniques to breed up a healthy lobster population, with habitat improvements, Fidel's live wells, and catch limits enforced with a ruthlessness that only a dictator could achieve. (The private sale of a lobster is a crime in Cuba; police hunt down black-market lobstermen as if they were crack dealers.) This allows Cuba to export frozen seafood to Europe and Caribbean resorts but also benefits Americans: Since lobster larvae drift up the Gulf Stream, Cuba's management actually helps restore American waters.

The restaurant was run by Gaviota. Dressed in a Hawaiian shirt, the *maitre d'* introduced himself as “Revolutionary Armed Forces Lieutenant Colonel Gerardo Tur.” Gaviota, he conceded, had “a close, very direct relationship” with the military. He himself had been seconded to the front lines of the tourism struggle and bragged of having “the best wine list in Cuba.” I didn't test him, ordering a daiquiri instead, and then, sitting behind a line of nine iron cannons, ate fresh-picked lobster meat with lime mayonnaise.

Behind me was El Morro, the light-house-in-a-castle that is Cuba's most

famous landmark. Down the sea wall I could see the U.S. Interests Section, glowing with anti-Castro propaganda and flanked by retaliatory billboards of Uncle Sam having his butt kicked by sexy Cubans.

At 9 P.M., the harbor gun went off, just as it has for centuries. It used to mean the port was closed for the night. These days, it is a starter pistol for the debaucheries to come.

A FEW MORNINGS LATER, at 4:20 A.M., I boarded an Ilyushin turboprop, the finest 1960s technology, for a smoky, rumbling flight to the eastern province of Holguin. A thundering salsa band greeted our 7 A.M. arrival, and the other passengers—European tourists—boarded buses to local beach resorts, said to be the most luxurious in Cuba. In a dusty parking lot, I negotiated for the front seat in an old Toyota jeep headed to Moa Bay, said to be the most polluted.

It is also one of the most remote. For ten dollars—three times what the five Cubans in back were paying—I got the front seat during a three-hour drive east. We climbed into the Sierra del Cristal, one of the most pristine places in Cuba, land of small streams, hidden groves of palm trees, tight valleys alternating with long vistas. Just four years ago a farmer discovered an “extinct” mammal, the groundhog-size almiqui, rooting in his crops.

The mountains gave way to the farming plains where Fidel himself grew up. Now it was more Marx Brothers than Marx: abandoned farms, bulldozed trees, cattle ranches with more cowboys than cows,

and a horse-breeding station that, the driver assured me, had only one horse. Cuba in a nutshell. By the time I made it to Moa at midday, I'd traded the Toyota for a Nash Rambler with a squealing piglet lashed to the bumper. In the back of a bicycle rickshaw, I went looking for the underground environmentalists.

This was slow going at first. The chain on this three-wheeled contraption kept slipping loose, and the driver would pedal forward, then remount the chain by pedaling backwards. We lurched down Moa's main street in this overtly symbolic manner (“That's Cuba!” some *bobo* shouted) to a humble wood house tilted over a dirty creek, the home of Silverio Herrera Acosta, an asthmatic 55-year-old photographer. With him was Francisco Hernandez Gomez, a young-looking 36-year-old activist. These two were it, their own tiny movement, without even a telephone yet subject to repression and arrest.

For all its green gains, Cuba is still a police state, as the island's few independent environmentalists are constantly reminded. Opposition ecologists and amateur greens who try to organize or protest can face an escalating menu of retaliation: career coldness and lack of promotions, followed by lecturing, then threats, then informal and formal detentions, all the way up to serious jail time. The founders of Naturpaz, a tiny, illegal group in Havana, have been arrested repeatedly for advertising the state of the filthy streams and streets in their slums. Cuba's real environmental policy, Silverio told me, is “Shut your mouth.” Fidel's conservation initiatives are like “a woman who puts on makeup but doesn't bathe.”

Silverio and Francisco had become activists only because Moa required it: An American company, Freeport Sulphur, built a refinery here in the 1950s, when this area was still wilderness; now Cuba operates three Soviet-built smelters—known collectively as the Che Guevara complex—and leases the American refinery to Sherritt International Corporation of Canada (which says that it does its heavy refining elsewhere). In a fit of central planning, the town of 65,000 workers was built directly downwind, and the result, Silverio said, is an epidemic of asthma and one of

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READERS SPEAK!

TRADITIONALLY JUICED: A few of you use wind and solar power daily (16% and 18%, respectively). A fraction use methane, geothermal, or ethanol (2%). And the rest of you (69%) use none of the above.

Cuba's highest lung-cancer rates. ("Even teenagers get it," he said.) He wiped a finger across his glass coffee table, bringing up a black smear. "I cleaned this yesterday," he said. "It's a residue of hydrochloric acid, caustic soda, ammonia, and others."

Francisco tried going through the proper channels. He wrote a letter; a government team came and looked at the nickel dust; he never heard another word. "You can protest to the government," Francisco said, "but it's just for your own pleasure."

In 2006 he started to organize a survey of asthmatic children, but the police came to his house four times, he says, warning him to stop. That June, he claims, he was attacked and beaten by government sympathizers and, when he tried to start the survey, summoned to police headquarters, where he says he was kicked in the head, back, and kidneys. Almost a year later, he pulled up his Puma T-shirt and showed me a long white scar.

Francisco and I were crossing an intersection when he shoved me into the bushes. A motorcycle cruised past slowly, the rider wearing an orange helmet.

"That's the guy who watches us," Francisco explained. "We aren't afraid of jail," he added, with more resignation than bravado. "If we have to go to jail, we'll go."

We went to the refineries instead. We hired a thundering 1950s wagon and rode through a landscape out of Road Runner v. Coyote, with red earth, yellow sulfur deposits, and clouds of billowing steam. Earthen berms made it difficult to see anything, but later, Eudel Cepero, an exiled Cuban environmentalist who was teaching at Florida International University, steered me to the coordinates on Google Earth. From outer space I inspected the pockmarked minescape, its gigantic slurry pools spilling plumes into the sea. This too is Castro's environmental legacy.

I had to get out of Moa. All three hotels rejected me, the daily buses had gone, and there were no cars for hire. At nightfall Francisco walked me to the highway outside town, where I waited until 11 P.M., one of 30 people in the dark hoping to flag down a ride. Finally, the patient Francisco suggested I sleep illegally at his house, even though "the captain will send men to beat you."

We walked home—zero carbon emissions—and before midnight arrived at the three-room house he shared with his wife, brother, niece, and mother. The mother sat in the front yard, in a rusty dentist's chair, smoking a cigar. I took a Cuban shower—a bucket of water, a cup, and a rag—and lay down on the family's best bed, a coil of taut ropes punctured by broken springs. Mosquitoes, breezes, and finally rain blew through the boarded walls.

Screw the resorts anyway: This was the

Cuba I loved, generous and striving, principled and poisoned, hotheaded, barefoot and stubborn, stirring alive. No amount of cynicism (or accuracy) can overwhelm that romantic mix of Cuban genius and chaos, mythology and self-contradiction.

I lay on Francisco's rope mattress for the next hour, too exhausted to sleep, counting glass bottles. Like all Cubans, his family carefully washed and reused them, and there were 42 stacked in the corner. Cuba is less a sustainable society than a pre-consumer one. Everyone walks or rides everywhere. Dumpsters are empty, because virtually everything can be fixed, sold, or traded, or fed to pigs. Paper is rounded up by old men on the state payroll. Everything from kitchen greens and eggs to pork rinds and table fish is gathered so slowly and so seasonally that it would make even a devout locavore swim for Key West in frustration.

Only necessity has made Cuba green, which may be the island's real lesson: No transportation. No shopping. No advertising. No energy. No waste, no fat and no gristle, no conspicuous consumption, and not much inconspicuous consumption either. Non-economy is green economy.

Eventually Francisco brought me a nightcap that knocked me out. It was a glass of water, reeking of sulphur.

FIDEL CASTRO MAY go to hell for the things he has done, but if he gets into heaven it might be for what he hasn't done—what has not been despoiled, destroyed, polluted, or paved. After that ear-busting visit to Maria la Gorda, I had taken my rental car even farther west, out the last, long, pot-holed road in Cuba, to the westernmost point in the West Indies, Cabo San Antonio. Here was one of the Caribbean's last refuges for a true dinosaur, *Chelonia mydas*, the oceangoing green turtle.

The land was flat, scrubby, and bitter, and only tiny iguanas—"shore puppies" in Cuban parlance—moved through the brush. After hours of searching, I spotted not a turtle but a lean, sunburned Cuban in a tight swimsuit and a cowboy hat. He ambled up from the beach, as surprised to see anyone here as I was.

Rolando Diaz is a 42-year-old wildlife technician; the government deploys researchers like him and students from the University of Havana to camp out in 15-day stints guarding eight beaches where the green turtles breed. He showed me his camp: a Eureka tent in the sea grapes, an AM radio, and a cistern for water. "Here we are trying to save turtles," Rolando said, "so my grandchildren can see them. We've seen as many as 130 turtles on this little beach, but there aren't many this year. Something is wrong. Normally they are here by now."

The biggest threat, he said, was not

development or predators but ordinary Cubans. Once, when technicians missed a single 15-day stint, hungry locals ate about 70 turtles. "We come here from Havana and tell people, 'Don't eat turtles, they are almost gone,'" Rolando explained. "And they say, 'So are we.' The majority here live on turtles. It is hard to do conservation in a poor country. It's hard to be an ecologist in Cuba." His salary was 350 pesos a month, or \$13. His own brother, head of the turtle program, had gone to a conference in Greece and never come home.

I stood the beach vigil all that long night with Rolando. The females come ashore most nights in the summer, dragging their dinosaur carapaces to the tree line and scooping out huge bunkers to bury a hundred or more eggs. One mother had come up last night, and Rolando showed me her four-foot-wide path through the sand, and the stick he used to mark the new nest. Aside from humans, dogs, feral pigs, gulls, rats, and even crabs would root up the eggs.

At 1:30 A.M., the night clouded over, hiding the moon. The turtles preferred this total darkness, but it made every rock in the surf look like a carapace, and clouds of mosquitoes emerged to torture me. Before retiring, Rolando warned me not to lie down, but I did, and I discovered why: The sand was infested with *jejeje*, mites that bit me until blood ran down my ankles. From 2:30 to 3:30 I tried napping on a smooth driftwood plank, then awoke with a yelp when a red crab bit my toe.

Rolando emerged from his tent again, and we sat listening to the waves break. He had the eloquence of a man who has been waiting for a conversation for 15 days. The ocean was "my friend the sea. It is beautiful above and below. That's my world, the beautiful sea. If I could be re-born, I'd be a fish, a whale, even a shark. I love them all."

"How much would tourists pay for that?" Rolando asked. "To have a crab touch their toe? Fifty dollars? Everyone wants nature. They could come here and see turtles and live in tents..."

After a while he went back into the Eureka, but I stayed, walking the empty beach, hours without light, traffic, people, boats, or anything but the sea and its mysteries, above and below.

I never saw a turtle. At 5:15 A.M., when the first crack of purple appeared in the east, I went to my little rental car, twisted across the front seat, and went to sleep.

Everything will be better tomorrow. ☻

Contributing editor **PATRICK SYMMES** is the author of *The Boys from Dolores: Fidel Castro's Classmates from Revolution to Exile*.