Chapter 12
Life and Death in Oaxaca

Every morning, well before dawn, the little boats set out. Each has two men in it, one sitting near the front and the other at the back to run the big outboard motor. They leave the marvelously picturesque little bay of Puerto Angel, skirt the spectacular rocks guarding the entrance to the bay, and move swiftly westwards along the tropical Pacific coastline of Mexico's Oaxaca state. The air is cold, but the wine-dark sea is warm as blood. Within an hour or so, the blackness of night passes, and the sun begins to illuminate the land. The coastal vegetation and topography, rugged and cactus-strewn on close inspection, look surprisingly soft at dawn from the sea. Tier upon tier of rolling, forest-clad hills reach off into the interior, recalling the 17th-century pastoral effect of a Constable landscape. By now the sea is a deep, pure, bottomless blue. Within another hour the destination is reached. The shoreline now is no longer rocky, but is edged by the sandy beach called Escobilla, several miles long. The object of the expedition starts to come into view. Turtles!

The turtles in Oaxaca are *Lepidochelys olivacea*, known in English as the olive or Pacific ridley, and in Mexico as *golfina* or Gulf-dweller because they are also found in the Gulf of California. The golfina is a worldwide tropical species that for unknown ecological reasons reaches spectacular concentrations in just a few parts of the world. Almost all of these locations are along mainland shores of the East Pacific, specifically in Mexico and Costa Rica. The animals gather from thousands of miles of coastline to nest during the later months of the year. Characteristically, the nesting is synchronous; the turtle gather offshore in an ever-increasing herd, move steadily closer to the beach, and when some invisible magic wand is waved they come ashore by the tens of thousands to nest in a hugely spectacular phenomenon known as an *arribada*.

Escobilla is one of these beaches where the turtles nest. Around August the turtles move into the adjacent waters, and they spend the morning hours floating passively on the surface, with their steeply humped shells reaching well above the water and thus visible from some distance.

When the boats reach the turtle-laden waters, the monotony of the journey is quickly transformed into near-frantic activity. The front man in the boat, the turtle catcher, strips down to swimsuit—or, more often, brightly colored undershorts—and attaches a long string to his wrist, the other end of which is attached to the boat. He stands as high as he can and when he sees a turtle, gestures and points vigorously. The motorman responds, gunning his revs, and races the boat alongside the drowsy turtle. Too late, the turtle sees the threat. Its lungs are full of air, and it cannot expel it quickly. Before it can dive, the catcher has leapt upon it, grasped it by the sides of the shell, and swum alongside the boat. The 40-kilogram animal is unceremoniously hauled over the gunwale and dumped upside down in the middle of the boat. The process is repeated. Time and time gain, the sequence recurs; high revs, jump, splash, and the catcher surfaces with a

Catching ridleys by hand, Oaxaca

feebly protesting turtle in hand. The pile of helpless reptiles builds up. Soon the quota of 40 turtles is reached. Not until then are the hard-working turtlers likely to take a break and have a simple late breakfast. Meanwhile the turtles remain, wedged at whatever angle they fell, occasionally beating a doleful tattoo on their breastplates with their flippers, or giving soulful sighs as the increasing sun beats on them.

The boat does not go right back to Puerto Angel. Instead, it stops short at a little landing place known as San Agustinillo. Many turtle boats, each quota-laden, converge on this place each day. Hundreds of turtles are quickly unloaded, each on the shoulders of a brawny fisherman. They are carried up a ramp and dumped over a low wall onto a concrete floor.

What happens next depends upon the equipment available. At times the turtles are killed with captive-bolt slaughterhouse guns, but with the amount of use the guns receive they soon break down, and parts are not available. I am told too that such weapons heat up too much in use; after 20 or so shots, they get too hot to hold. Even for a gun, killing can be too much, too fast. At other times a regular .22 caliber pistol is used. But usually the turtles are killed by hand. The first time I was there, as I watched the turtles being unloaded, I heard heavy thunks and bashing noises proceeding from the partially enclosed slaughter area. Young Mexicans—they looked like teenagers—were bashing the turtles to death with heavy iron bars. It took multiple hits to kill each turtle. The turtle skull is thin, but under the bony roof lie the jaw muscles; the brain is in a separate bony chamber, much deeper in the head. Sometimes turtles with the crown of their head seemingly completely smashed continue to live, and only die when a worker notices then and grinds the end of the iron bar deeper into the gaping head. As each turtle's skull was caved in, its eyes closed, its throat bulged out, and its hind flippers would stiffen and straighten until the hind part of the shell was raised high off the ground. Then, blood pouring, the turtle was dumped in a pile in a corner of the area. On a busy day, the pile occupies most of the floor, many turtles deep.

A small conveyor belt conveyed the dead turtles to another chamber, where they were grabbed by willing hands, laid on their backs, and deftly laid open with knives of unbelievable sharpness. The real tragedy of the operation then became apparent. Practically every one of the turtles was an egg-bearing female; the hundred or more eggs in each turtle seemed to take up as much room as the rest of the viscera combined.

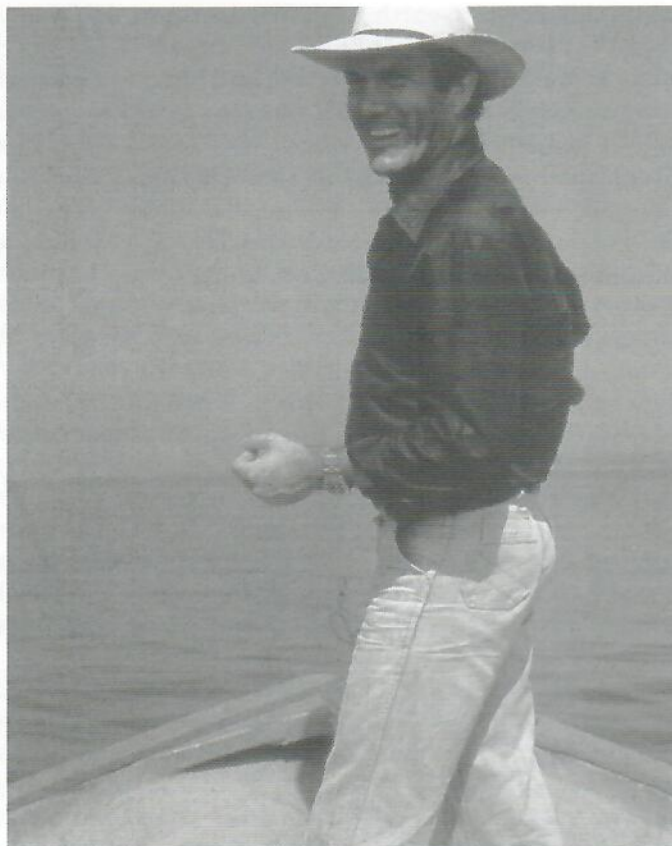
The pile of ridley shells near the Oaxaca slaughterhouse

I learned that the leather was the most valuable part of the turtle, and provided the economic driving force for the operation. This was salted and sent to Mexico City for tanning. The meat was packaged and frozen. The bones and shell were ground up for fertilizer. The eggs were stripped from the oviducts, washed off, and incubated in Styrofoam boxes, but not more than 20% of them hatch.

Many questions crowd into the mind. Why does the government allow it? Who is getting rich from the slaughter of the turtles? Are they wiping out the species? Are there any limits on the take? Where do the products go? How long have they been doing this? All these questions can be answered, but to gain any real insight into the operation, it is vital to comprehend the background, personality, and drive of the man behind it, Antonio Suarez.

Nominally, the turtles are caught by fishing cooperatives and are sold to a company known as PIOSA (Pesqueras Industriales de Oaxaca, Sociedad Anonima, i.e., Oaxaca Fisheries, Inc.), but the industrial plant and the whole commercial operation are the brainchildren of Suarez, the owner of PIOSA.

Antonio Suarez is a Spaniard. He has an aristocratic, moneyed background, and his family, although with diversified interests including Spanish coal and iron mines, has for generations been in the business of handling and marketing fine skins and hides. He is a man of taste and culture; his house in Mexico City is decorated with magnificent



Antonio Suarez: the man with a dream—or a nightmare

pieces of art, both modern and traditional, as well as fine Persian rugs and elegant furniture.

In appearance, Suarez is of medium height, with very erect bearing, generally slender in build although he is liable to put on weight during his trips back to Spain. His complexion is ruddy, with heavy brows and tight, controlled brown eyes. His hair is receding, and definitely thin on top. His teeth are expensively rebuilt, I believe following an automobile accident that left him with a long scar under his chin. His speech is fast, pouting, lisping Castilian; he rarely attempts to speak English, though he probably follows English conversation much better than he would be prepared to admit. His surprisingly thin, white arms contrast with his rubicund features. Someone who was asked to guess his age would suggest late 40s or 50s, but he is just 37. He has a powerful ego, though the cocky self-confidence I saw on my first encounter with him seems since to have given way to a somewhat more reflective, worried, and less self-assured nature. He is a brilliant, animated raconteur, and has a great deal of charm, to which neither men nor women are immune. He has great intelligence, and I must confess that I not only enjoy his company, but find debate with him over economic arguments, biological models for turtle populations, and other topics most stimulating. He has a somewhat satanic look, especially when he smiles, and would be perfectly cast as the villain in a Victorian melodrama. Philosophically, he is inclined towards the mystical, though not to

the extent of shaking his down-to-earth capitalist instincts. He was very thoughtful when he discovered that I came from Oviedo, Florida, while he was born in Oviedo, Spain, and mused for some time that perhaps fate had brought us together. Similarly, I heard him reflecting sinisterly one day that it was *cosa curiosa*—a curious thing—how accident or misfortune happened to people who crossed him. I asked him if the happenings that befell his enemies were caused by the hand of God or the hand of Suarez. He grinned somewhat malevolently and said, "la mano del Diablo"—the hand of the devil.

Suarez is able to make jokes at his own expense. He enjoys telling people about his nonexistent grandchildren, and his audience, assuming him to be much older than his 37 years, accepts everything he says. I thought the basic sadness of his chosen way of life must have crossed his mind when we were driving together along the coast road to Colima, when I stopped to pick up a land turtle crossing the road. Suarez said, "Peter, when you come by, the turtles come out to see you. When I come, they run and hide."

On the other hand, Suarez sometimes is unsure of the proper responses when others make jokes at his expense. One of his favorite arguments is conservation by exploitation—give something cash value, and there will be money available to pay for the management program and conservation of the species. As he and I gazed with admiration on the magnificent Tree of Tule—the world's largest—not far from Oaxaca City, I suggested to him that perhaps he could develop a plan to save the Tree by industrializing it. He gave a lame grin, and finally added that if there were more of them, that might indeed be the way to go.

Suarez first came to Mexico in 1966 to attend the wedding of his future wife's sister in the State of Oaxaca. He went back two months later to develop this relationship, and at the time, met the Chief of Police. By chance, he was shown a live ridley turtle, the first sea turtle he had ever seen, and learned that there was a new and growing market for turtle skins in New York and elsewhere. His interest was immediately stimulated because of his family background in mink farms and other animal skins, and on his return to Europe he learned that the demand for turtle skins was unmet and essentially unlimited. Thus began Suarez's involvement in the turtle business that led, in the course of the next decade, to his responsibility for the slaughter of about one million adult sea turtles—a record unequalled in the history of the world, and one which, together with his interest in various family business concerns, made him an extremely wealthy man. To be fair to Suarez, he did not exactly invent the killing of turtles in Mexico, or even in Oaxaca. When he came to further develop his plans for his turtle skin industry in coastal Oaxaca, he was struck by the ignominious way in which the turtles were killed just for their skins, the meat, shell, and all other parts being simply thrown away or buried. The skins were exported raw, pickled in salt, to be tanned (and the major profits realized) in the importing nation.

Suarez decided that this industry had to be put on a sounder footing. He made proposals for "proper industrialization" and "total utilization" of the resource to the Fisheries Department, who, realizing that they had no real control over what went on in these remote and dangerous parts of the Pacific Coast, gave him the go-ahead to proceed. Suarez thus defends his presence, saying that without him, turtles would be killed without any kind of control, and the eggs would similarly be ransacked wantonly. With him, quotas are set on the take of turtles, and the tax per head on turtles caught finances the establishment of armed beach patrols to ensure the safety of the eggs.

It sounds good. It can sound very good to naïve individuals who watch one of the incredibly slick movies that PIOSA has sponsored. Suarez has persuaded all the necessary authorities that what he is doing is a Good Thing, or at least a Necessary Thing. In

fact, he has covered his political bases with masterful skill. He claims friendship with the Governor of Oaxaca, the director of Fisheries, and even the Archbishop and the President, though he may be inclined to exaggerate the closeness of the relationships. He also married into one of the oldest and most influential families in Oaxaca, in a ceremony in the famous gilded church of Santa Domingo. Similarly, Rodrigo Moya, the editor of *Tecnica Pesquera*, a widely circulated Mexican fisheries journal, is a friend of Suarez. Suarez's not-so-subtle influence has caused the evolution of that magazine from one that championed the cause of the turtles in ways that conservationists found highly laudable in the late 1960s, to a shrill lobbying and editorializing vehicle for the turtle industry, labeling the huge quotas—which it considers to be too low in many cases—as a manifestation of "rational exploitation," and condemning as "polemical" the voices of opponents, who are dismissed as "international hippies." *Tecnica Pesquera* has been guilty of identifying turtles in Mexico as "un recuerso recuperado"—a recovered or restored resource—while even Suarez admits that turtle populations in Mexico have been diminishing during the last 15 years.

In the face of influence of this type, it is not surprising that concerned individuals have made little headway in their attempts to lobby the Mexican authorities to reduce their take of turtles. It is easy to label the Fisheries Department as weak or corrupt in its ready accession to every whim of Suarez, and its allowing him to set the quotas on the catch of turtles, which they have historically rubber-stamped, despite the protests of the departments' biologists, but such a dismissal of the Department would be over-simplistic. On the Pacific coast of Mexico, federal law is not held in high esteem, especially when it denies impoverished people access to resources that they feel are theirs. Moreover, unacceptable regulations are not really complained about so much as ignored, and the fisheries inspectors who cannot be bought off with a few nests of turtle eggs run a real risk to their lives. The Department is therefore relieved that Suarez is prepared to bring his investment and his presence down to the Pacific coast and bring a little order out of chaos, even if the result is still a capture rate that is greatly in excess of what biologists consider to be an acceptable level. It takes someone of Suarez's powerful personality, intelligence and drive to set himself up at the *chingon*, the toughest, most macho guy on the block, even to survive; and, by establishing a guaranteed market and a variety of support services, to set himself up in the minds of the *cooperativistas* as someone they need as much as he needs them.

Nevertheless, it is not as simple as that. If the Fisheries Department really put its mind to it, egg taking could be stopped at Escobilla, and the illegal take of turtles could be brought under control if enforcement personnel of sufficient vigor and integrity could be put on the job. Mexico has relatively few highways leading into other remote coastal regions, and spot checks of trucks for eggs and turtle products would not be an unprecedented proposal. At Rancho Nuevo, on the Gulf coast, poaching of the Kemp's ridley has now been almost entirely stopped simply because Fisheries decided that it was willing to make a major effort for this extremely rare species, even though local people have a pronounced appetite for both turtle eggs and meat.

Actually, there is evidence that the center of power is shifting towards government. Once willing to accept almost anything Suarez proposed, Pesca now regards the "request" by industry as only one of the factors to be used in setting quotas. Another encouraging sign occurred in Oaxaca in 1979, when Pesca established rules prohibiting the capture of turtles in the waters immediately in front of the Escobilla nesting beach. The rules were unpopular with the cooperatives, and there were some violations. Two violators were actually intercepted by government biologists who confiscated and released

the turtles on both boats. The cooperatives complained to Pesca headquarters in Mexico City about this seizure, which they regarded as improper because theoretically, only fisheries' inspectors can make such arrests; but the complaint was dismissed.

Mexico argues that it cannot afford to stop the Pacific coast turtle take because it needs the revenue generated by the high prices paid for tanned turtle skins in Italy, France, Spain, and Japan. This argument may have had past and even present validity, but the recent oil discoveries made in Mexico will outweigh by a factor of a thousand-fold the export revenues to be gained from turtle skins.

Suarez has only recently become aware of the biological realities of sea turtles, and claims that he has been the focus of attacks not only from fishermen who want to catch more turtles, but from conservationists who want fewer to be caught. In fact, this is only partially true; some of the cooperatives have been complaining, not just privately but in the press, about the numbers of turtles being taken for Suarez, and at least two were opposed to the catch of turtles in Oaxaca during the breeding season. Moreover, the egg traffic is not well controlled, although Suarez's management plan is based on protection of the eggs, to augment recruitment of young turtles and thus justifying a higher catch of adults.

The marines are often reluctant to do any real clampdown on *hueveros*—egg collectors—on the beach at Escobilla. On a recent occasion they declined to go out on an enforcement mission on the excuse that their flashlight was not working—and declined the offer of a flashlight by an American biologist present as an observer. Thus, the eggs are sold more or less openly in almost every *cantina* in the coastal villages. Moreover, Suarez's claim that his role was the bringing of order to an uncontrolled exploitation situation is belied by his recent interest in Costa Rica. Suarez appeared at the 1979 meeting of the parties to the Convention of Trade in Endangered species in San Jose, Costa Rica, at which time he began to express interest in the still enormous breeding populations of olive ridleys on the Pacific coast of Costa Rica. Most cynics assumed that he was now realizing the imminent commercial extinction of the ridley in Oaxaca and was looking for pastures new, leaving the wreckage of a collapsed resource behind him. However, he is much too clever a man to propose anything so gross as commercial exploitation of a turtle population that nests largely in a National Park and has not been subject to the kind of unplanned exploitation that Suarez found in Oaxaca. Arguments of bringing order out of chaos would not apply here. Instead, he harped at length upon the habit of local villagers of bringing their pigs down to the turtle beaches after an *arribada*, to feed on the turtle eggs that they could dig up almost anywhere—a habit that seems wasteful, but that, because of the extensive nest destruction by later-nesting turtles that would otherwise occur, is probably of no significance to the survival of the species. Suarez has started to talk about hatching the eggs that the pigs now eat, and perhaps at some distant time, harvesting the turtles that would result from this increased recruitment. But, of course, nothing could be further from his mind than doing such exploitation now or even soon. Instead, he proposes to donate to Costa Rica a turtle research laboratory that could establish the population parameters and dynamic before any exploitation starts.

Sounds good. The problem is that turtle biologists have been trying to work out the population dynamics of sea turtles for several decades, and they have signally failed to come to any real conclusions. Even the maturation time for the green turtle—the best known species—remains in great doubt, and the dynamics of the olive ridley, that disappears after the hatchlings enter the sea and does not reappear until maturity is reached, are the least known of all. Moreover, a biological station in Oaxaca, opened by PIOSA

with great fanfare two or three years ago, has not produced a single scrap of biological information. It was purely a public relations gesture that, having been milked of all possible value in that capacity, was handed over to the Fisheries Department in late 1979. Meanwhile, Fisheries has expressed little interest in the facility, which today stands as a collection of usually empty tanks and a few pet hawksbills, young ridleys, and crocodiles—one of Suarez's new interests. The elaborate breeding tank, with an artificial beach along one side and facilities for separating and reintroducing male and female turtles, stands empty except for a few inches of hypersaline water, in which two crocodiles bake disconsolately in the sun.

It does not take a very doubting disposition to question Suarez's motive in Costa Rica, and to postulate a scenario where the establishment of a "research station" and the prevention of local villagers being allowed to take their pigs to the beach would be quickly followed by massive "industrialization" of the Pacific Costa Rican turtle population. At present, Costa Rica, being a signatory to the Endangered Species Trade Convention, outlaws exports of ridley products for commercial purposes. However, Ecuador openly exports massive volumes of ridley products despite being a founding member of the Convention, and Costa Rica, more conscientious about international agreements but subject to the same commercial pressures, came perilously close to taking sea turtles off its list in 1979.

In the course of the last year, I have met with Suarez three times and engaged in an in-depth discourse about his operation. This series of encounters was the result of efforts by a team from the Arizona-Sonora Desert Museum—Richard Felger, Carlos Nagel and Kim Cliffton—who have been engaged in a major World Wildlife Fund project on turtle conservation in Pacific Mexico, and who were responsible for the predictions of extinction of the populations that resulted in the United States classification of the Mexican Pacific green and ridley populations as endangered. Most sea turtle conservationists had dismissed Suarez as unreachable, dangerous, and to be avoided at all costs. However, the Arizona team has courageously decided that the most constructive approach to someone with whom one has fundamental disagreements is to meet, talk, and to try to understand each other's perspectives. This method also happens to be more productive of results than the "cold-shoulder" approach.

In the course of these meetings, Suarez suggested to us that he would be prepared to finance an observer at Escobilla throughout the season, to provide an impartial witness to the continuing existence of the great nesting arribadas. This we have done; Tim Clabaugh and Angela McGehee, both of the University of Central Florida and veterans of the Rancho Nuevo Kemp's ridley turtle patrol program, between them covered the beach during the 1979 nesting season. Suarez also proposed that he host a meeting of the turtle conservationists of our choosing in Oaxaca at a time that he hoped would coincide with an arribada at Escobilla. This invitation we also accepted.

The meeting took place in September 1979, and Suarez spared no expense in keeping the group well fed and watered. Diversions were laid on, including visits to the ruins of Monte Alban, the church of Santo Domino, and the great Tree of Tule. But while enjoyable, the trip was no junket. We inspected all aspects of the turtle operation, and engaged in many hours of serious discussion, constantly hitting Suarez with the non-negotiability of the fundamental biological characteristics and constraints of the turtles, and urging him to reduce his capture before it was too late. Suarez answered with many of the arguments presented elsewhere in this article, but clearly showing respect for the opinions he was hearing, and raised our hopes that in the long run, he may start to espouse them himself. There was no question that he found the sessions draining as

well as enlightening, but his prodigious energy saw him through the week despite his having returned from Spain only a day before, and having no night with more than 3 or 4 hours sleep during the week of the meeting.

On the first day after our arrival at Puerto Angel, Suarez took us to see the laboratory, the tanks for the young turtles that had until recently been exposed to the full equatorial sun were now shaded, but otherwise the party was not greatly impressed. The place seemed nearly derelict. The conveyance of the facility to the government had taken place only a couple of weeks before, and neither PIOSA nor the Fisheries Department seemed to be doing much with it. We all asked ourselves why Suarez was going to all the expense of entertaining and debating us, since his continued operation was in no way dependent upon our approval, and the things we saw at Puerto Angel and San Agustinillo were hardly calculated to make us feel any better about him anyway. The only conclusion we could reach was that our opinions did indeed mean something to him; that he thought we could be dissuaded from an excessively critical posture by an "open door" policy, with the chance to have all our questions answered; and that he was sincere when he said that the worst legacy he could leave his beloved seven-year old daughter would be the knowledge that her father had wiped out the turtles—a concern of his, quite frequently expressed, that we played up to with gusto.

After the visit to the laboratory, Suarez had arranged a demonstration at the slaughterhouse. This was a somewhat orchestrated performance, designed to show us the techniques by which the turtles were killed and processed, without exposing us to the mass death scene that took place there each morning. This part of the tour also took place after dark—I suspect because he hoped that we would not take photographs. He was somewhat disturbed when at least three members of the party took out flashguns and dutifully recorded all stages of the bloody operation.

Turtles awaiting slaughter were kept in a large concrete pool. This pool was an innovation not present on my previous visit, two years before. The slaughterhouse had been carefully washed down, and everything was looking clean and nice. A group of employees had been requested to stay on and show their skills, and were standing by looking willing and ready in their laundered, unbloodstained tee-shirts and shorts.

Two turtles were pulled out of the tank. They were placed head downwards on a curious sloping table with a guard at the lower edge into which semi-circular cuts had been made, each of which received the head and neck of a turtle. Almost casually, a worker took a pistol, placed it against the head of the first turtle, and fired. A fountain of blood sprang up to a height of about a foot, then slackened a few seconds later as the volume and driving force of the blood failed. The turtle's eyes glazed and closed. It became inert surprisingly quickly—generally turtles do not die tidily or on demand, but continue to twitch and slap for a long time. The process was repeated with the second turtle, the head of the quiet reptile suddenly ejected an ephemeral fountain of blood as a living creature was converted to a load of dead meat. The two turtles were turned over to facilitate drainage of the blood, then were placed on the conveyor belt and taken into the adjoining chamber. The conveyor belt seemed a somewhat irrelevant little technological detail, with the abundance of strong hands that could easily have passed the dead turtles through to their colleagues in the next room; it seemed as if Suarez's goal of "industrialization" of the turtle resources required all of the little symbols of industry, including that most ubiquitous symbol of mass production (or destruction?), the conveyor belt, be incorporated in the plant.

In the next room, the turtles were laid out on stone blocks with shallow depressions so that the convex carapace would rest without rocking about. Then I was struck as I

had been before by how inadequate the bony shell of a sea turtle is to protect it from ingress by that harsh and clever latter-day predator, man. To convert an intact ridley into a carapace-bowl of bloody viscera and eggs does not even require the cutting of any bone; the well-ossified shell of a sea turtle has no bony connections between the dorsal shell or carapace, and the breastplate or plastron. With a sharp knife, the plastron can be cut out in about twenty seconds. The armor that protected the turtle for a hundred million years is simply no barrier to a knife-wielding Oaxacan.

Suarez was proud, too, of the speed with which his workers would remove the skins from the suspended front and hind quarters of the turtles. With quick cuts and slices of the same scalpel-sharp knives, it took only a minute or two to separate the two irregular-shaped pieces of skin and drop all the other parts into a plastic bucket. Laura Tangley of Defenders of Wildlife felt somewhat different emotions as she reached into the bucket and picked up a still-beating heart in her hand.

I returned the following day, with two or three colleagues and a somewhat reluctant Suarez, to see what a more typical day at the slaughterhouse was like. The killing was finished for the day, and all the turtles—hundreds of then—were already dead. The butchering room and the skinning rooms were awash with blood. Never have I seen a place to which the term "blood bath" better applied. There was an inch of blood on the floor, oozing slowly towards gutters that sloped off towards the sea. The walls were covered with it. The workers were speckled and smeared with it from heed to foot. Suarez saw my grim countenance and said: "This is not a pretty sight. I do not like it either." I even think he might have been sincere, the irony of the fact that he had built the building, designed the operation, and paid the workers notwithstanding. Perhaps his philosophy is that it is better not to look, rather than that it is better not to let it happen.

Ridleys are less variable than other sea turtles. The adults show little variation in size or shape. A big one has a shell length of about 28 inches, a small one about 24 inches, most are 26 or 27 inches—the size spread of mature green turtles or loggerheads is much greater. As the turtles were being systematically disassembled in this "fully industrialized" fashion, it seemed almost as if the turtles themselves, all so similar, had similarly been produced or stamped out in some "fully industrialized" facility, rather than that each one had been hatched years ago (how many, who knows?), had beaten the odds against hatchling survival (100 to 1, maybe even 500 or 1000 to 1, against), had migrated, grown, sought for and found food, reproduced (perhaps), and lived before meeting its rendezvous with PIOSA at the little adobe slaughterhouse at San Agustinillo.

I am a a biologist, but I find occasional indulgences in anthropomorphism important to maintain compassion and respect for life. I tried to single out individuals in the stream of turtles entering the plant, to wonder about there particular origins and journeys through life, and what went through their hopefully dim minds as they passed through their violent last minutes. I saw a turtle out of many on the floor and walked over to it. It was already dead. Head intact, not perforated by bullet or smashed by iron bar, but stiff, eyes sunken, dead. It had probably been caught and unloaded at Puerto Angel, left in the sun for hours, and then dumped in a truck with six layers of turtles on top of it for the bumpy journey to San Agustinillo. Not killed, but abused to death, sacrificed to make a pair of shoes for an Italian pimp. Programmed by its genes and prompted by its swelling ovaries to migrate hundreds, perhaps thousands, of miles to Escobilla, to hurry ashore, as ridleys do, build a nest, lays its eggs, and cover them up with the marvelous light-stepping dance that the ridley species have evolved, alone among sea turtles, as

part of their nesting rituals, all this was lost and brutally intercepted by its bad luck to have been floating in the path of a turtle boat the previous day. I am a rational person, conversant with notions of sustained yield of wildlife, not unsympathetic with the capitalist ethic, but felt extreme revulsion at what I saw.

A couple of days later, I sat on the veranda of a hillside cottage overlooking the beautiful coast of Michoacan, a few hundred miles west along the Pacific coast of Mexico, trying to analyze my thoughts and get them in order. I had a large sack of oysters beside me, and my conscience bothered me not at all as I pulled them out of the sack one by one, smashed them with hammers and rocks, opened them with a blunt knife, and ate them with gusto. Were turtles and oysters really comparable resources? I smash up oysters, and Suarez smashes turtles, and there is really no difference? And I started to think about slaughterhouses in general. None of them are pretty, and all get smeared with blood as the day's work proceeds. Perhaps I am being unfair in dwelling on the ugliness of the slaughter while continuing to eat beef, pork, and other slaughterhouse products. I am sympathetic to the vegetarian ethic, but have never practiced it myself. Am I a hypocrite, well fed and comfortable, objecting to the Mexican turtle slaughter just because turtles are my favorite animals? But after a little cogitation, I decided that my position was a fully tenable and consistent one, for the following reasons:

First, the Mexican Pacific olive ridley populations are formally listed as "endangered" by the United States Department of the Interior. This listing was not made cavalierly or without due consideration, but rather followed years of data gathering, and took account of the observation that the other massive nesting colonies in Pacific Mexico—in the states of Jalisco and Guerrero—had been virtually wiped out, to the point that the great nesting arribadas no longer took place, within the last decade. Any animal that is listed as endangered, whether snail darter or rhinoceros, should be protected, and while concessions for subsistence use of such valuable animals as turtles may be necessary, concessions to international commerce are not.

There are still a lot of turtles in Oaxaca—even in 1979 the nesting aggregations, though reduced from former years, still dug each others' eggs up, such was their density—but I know of no turtle biologist that regards the annual take in Pacific Mexico to be within the sustainable yield of the population. Conservationists urge caution when exploiting a species whose life history is almost completely unknown. Only adult olive ridleys are found in Oaxaca, and the maturation time or even the location of the post-hatchling, pre-adult turtles is still speculative.

Suarez admits this information gap, but has some ideas of his own (which he usually introduces as *una teoria mia* with considerable panache). He feels that the adult turtles look much younger now than when he started in Oaxaca, and concludes that the old animals have now been largely killed off, but that they are being replaced by young adults derived from the hatchlings that PIOSA has released over the years. He also asserts that the population is being monitored, and that serious decline will result in a reduction of quotas, or even a complete closed season. But he warns, as always, that biological considerations are only one of the factors in the management of the species. Economics, politics, and sociology also play an important part. As illustration of this, the East Pacific green turtle is in an even worse shape than the olive ridley, and Suarez agrees that total protection is now biologically justified and desirable. He also maintains that green turtles are not an important economic consideration for him personally, and he would not be making any great personal sacrifice by refusing to buy any more from the cooperative. But he warns that a complete ban might force a partially controlled situation out of control; if he did not buy any more, cooperatives, in large part made up

of coastal people with no real economic alternatives, will sell elsewhere or operate outside the law rather than cease operation. Suarez warns constantly about what he calls *palabras bonitas*—beautiful words, laws, regulations, or promises that sound extremely high-minded but which reflect little if at all on what is happening in the real world. And he is right.

Suarez likens himself and PIOSA to a nozzle on a fire hose. The turtle slaughter that he found when he first came to Mexico was out of control, like a runaway fire hose. To bring about control, there is no possibility of fitting a closed-off nozzle onto the hose; but if an open nozzle is attached—and Suarez likens himself and PIOSA, with its ultimate monopoly, to an open nozzle—then and only then can the nozzle be closed off or adjusted to bring control of the situation.

Suarez looks upon the Unites States ban on his product as a personal insult and an unjustified vote of no confidence in his quota and management program. He asserts that the take of olive ridleys in Ecuador doubled immediately when the U.S. ban went into effect, since, being cut off from the most lucrative foreign market, the fishermen had to catch far more turtles to meet their target income. Conservationists, including myself, have always assumed that the more valuable a commodity becomes, the more it is sought, and if markets for endangered species product are progressively closed, the pressure on the wild populations of those species will diminish. This certainly works for many species and in many cases—for example, the pressure was not really taken off the American alligator until the New York market was closed for the skins—but it does presuppose that the exploiters have some flexibility and can move to other work when selling the product becomes difficult. Suarez argues that in coastal Mexico or Ecuador, there are no real economic alternatives at the present time, and to reduce the quota on turtles, and have it stick, he needs to be able to offer the high price per turtle that access to lucrative foreign markets implies. The upshot of his argument is that, if we are serious about saving turtles, we should open the U.S. market to an annual quota of turtle skins and other products, so that he could expand his monopoly, increase his control, and gain the ability to recommend quotas to the Fisheries Department that will actually be acceptable to the cooperatives and thus enforceable.

Conservationists need to consider these arguments carefully, lest they get stuck defending yesterday's dogma, or politics that worked in other places with other species that may not work here. But there is unquestionably a self-serving element to Suarez's arguments. Higher prices for the cooperatives also means higher prices for him. And he conveniently overlooks the fact that some of the cooperatives are in fact far more restrained and conservation-minded than he is. Two of them, for example, strongly opposed the taking of the olive ridley during the breeding season. He also ignores the realities of law enforcement. If any turtle products were legal in the United States, prosecution of purveyors of illegal products immediately takes a quantum leap in difficulty. During the brief period in 1979, products from the Grand Cayman Turtle Farm could be legally exported to the United States but the wild product was banned. During that time, the quantity of meat and other products that was freely imported and represented as having been raised on the farm was several times the amount produced by the real farm. I know and like the owners of the Cayman Turtle Farm, but must observe that their product creates the opportunity for wild turtle importers to sell their product in the United States with virtual impunity. One can contrive many *palabras bonitas* about shipment in bond, approved ports of entry, import quotas, and so on, but the reality is that if any of it is legal, law enforcement does not take place.

As a side note, since the sea turtle ban was instituted in the United States, turtle

meat has continued to flow in through several ports. It is now labeled "Tabasco River Turtle, *Dermatemys mawi,*" the latter being a rare species from the tropical Gulf of Mexico river drainage in Tabasco, Campeche, and Veracruz. This species, even more than the olive ridley, should be listed as endangered, but it is not, and so, unless the identification is challenged, product so labeled can enter the United States. It is hoped that this loophole will be closed soon; the national Marine Fisheries Service has already confiscated over 250,000 pounds of turtle meat mislabeled in this way.

The other reasons to object to PIOSA's operation center on aesthetic considerations: These may matter little in an area as tough and poor as coastal Oaxaca but they matter to the world nonetheless, and Suarez will have to face them if, now that he is comfortably rich, he wishes to have the world think well of him—which I think he does. To catch and butcher the female ridleys as they gather, laden with eggs, off the shores of Escobilla is the moral equivalent of a terrorist bursting into a maternity ward with a machine gun. Massive-scale killing of breeding females of an endangered species, for profit, is simply not an acceptable activity to most educated decent people. Moreover, in the long run, Mexico has a vested interest in preserving the ridley arribadas in as intact and spectacular a condition as possible. Just as Ecuador has now recognized that the Galápagos National Park will draw many thousands of well-heeled visitors annually—*if* the endemic biota is conserved—so Mexico will in the long run profit greatly by the influx of tourist dollars to its remote coastal areas if it can offer people a chance to see what must surely be one of the most dramatic natural spectacles in the world—a beautiful tropical beach covered with thousands upon thousands of nesting turtles.

The day after the tour of the laboratory and slaughterhouse, Suarez invited us out to see the turtles in the water and to demonstrate how they were caught. In view of our sensitivities this was to be a demonstration only; turtles would be caught in the area close to the nesting beach, temporarily closed to commercial turtling until the next arribada came ashore, and would be re-released. We used two boats. I traveled in the one with Suarez himself, and the other observers in the boat included Archie Carr, George Balazs, Carlos Nagel and Richard Felger.

We saw no turtles for some time, and then we came into the area quite abruptly. After we had spotted two floating turtles, I commented that well, there were at least two left. That means one for me, replied Suarez. Soon we were among them, sometimes seeing eight or ten at once. Suarez was keen to have me admit that they were as abundant as they had been when I was there two years before, and in truth they seemed to be, though the comparison is too superficial to be meaningful. What seemed strangest about them was their tameness. This was especially striking to George Balazs, who for years has worked with the skittish green turtles on Hawaii, and who was dumbfounded to see turtles that showed no sign of alarm even when the boat passed right beside them.

By this time the three female occupants of the other boat—Angie McGehee of the University of Central Florida; Georgita Ruiz, a veterinarian and turtle biologist from Mexico City; and Laura Tangley of Defenders of Wildlife in Washington, had stripped down to skimpy bikinis and were practicing catching the turtles and swimming among them. Dr. David Ehrenfield, the turtle biologist and ecologist from Rutgers University, remained in the boat looking somewhat overdressed, cerebral, and a little nonplussed by his athletic female companions, who in truth greatly impressed the Mexicans who had always considered that only Men could catch turtles.

After taking a lot of photographs, I finally slipped into the sea myself, with mask and tube. The water was the most sensually perfect I had ever encountered. The sun's rays

refracted through the cobalt-blue water, converging on remote points dozens—seemingly hundreds—of feet below. The temperature made one feel that mankind was designed for lolling in tropical waters, not for the harsh exigencies of terrestrial life. I swam slowly up to a turtle, and hovered in the water a few feet away, watching the play of sunlight on its every scale. It gradually summoned the energy to swim and paddled in a slow circle, with me following. It went down at the same unhurried pace, finally and with total relaxation disappearing into the fathomless translucent depths. But there were more. Turtles on all sides, with sylphlike human female forms swimming among them. For a hedonistic cheloniophile like myself, it was bliss.

I climbed into the boat. George Balazs then decided to go into the water, and was just relaxing his hold of the boat when I said "sea snake!" Relaxed muscles tightened again, and he came back into the boat fast. And indeed, he would have fallen right on top of a yellow-bellied sea snake that was swimming up to the boat. These snakes are not in the least aggressive, and most people who live near them do not realize that all sea snakes are venomous and many have venom of almost unbelievable potency. Another snake swam near the back of the boat, and Suarez reached out to pick it up. I warned him of the risk he was taking, and he pulled his hand back with a sly smile. "That might have been the end of all your problems," he said.

Back in Puerto Angel, one of the many stark ironic contrasts of the trip manifested itself. A dozen or so turtles had been brought ashore and left in the sun on their backs for someone to pick up some time. The sudden shift from the turtles relaxing in their oceanic environment, feeling, however illusorily, at peace with the world to these wretched beasts baking in the sun was shocking. We reported the incident to Suarez, and he dismissed it by saying that a truck would come for them soon, and that this did usually happen. But later, while enjoying his hospitality in his sumptuous Mexico City residence, we pressed him again for a commitment to make improvements in the handling of the animals.

"Look," he replied. "The people on the coast of Oaxaca are not like you and me. They cut each other up for recreation. Do you think we can get them to worry about the suffering of turtles? Do you realize that the lowest-paid job in the whole operation is the actual slaughter of the turtles and yet that is the job everyone wants? Violence is a way of life for these miserable *cabrones*, a Mexican word that literally means male goats, or, in common speech, assholes. Just to show you what they are like, let me tell you something that happened not long ago.

"After the day's work at the slaughterhouse ended, two of the workers got into a fight. One of them pulled a gun and shot a hole through the head of the other one, who dropped dead with his head cocked sideways in a *postura muy extrana*"—a very strange posture—which Antonio proceeded to demonstrate. "The authorities were called, but they always get drunk on weekends, and it was two days before any of them came to investigate. Meanwhile, a wedding reception and dance had been planned. The failure of the authorities to pick up the body could not be allowed to stop this." Antonio continued his story with dramatic gesticulations showing how everyone had had a wonderful time that evening with the bloating corpse still in the same crumpled configuration not 50 feet from the dance floor. I made a feeble joke to the effect that surely the law required "aprovechamiento total"—complete utilization—of a corpse so near the turtle plant. "Why don't you try hiring some more sensitive workers?" I asked. "Ah Peter," he replied. "I have tried that too. Just about three weeks ago, before I left for Spain, I hired a new plant manager. Highly educated man, with a degree in food science. I left him in charge at Puerto Angel and departed. When I came back just a couple of days ago, I

checked my office in Mexico City and there he was sitting there, "What are you doing here?" I asked. "You should be in Puerto Angel managing the plant." "I have resigned," he replied. "Why?" I asked. "Because that place is a hell on earth." So you see, Peter, these subhuman *chingaderos* ("fuckers") are the only people we can get to do the work.

This has not been an easy article to write. Both the situation and my views on it are too complicated for the story to be a facile one, with a simple theme and clear-cut heroes and villains. Despite the sad and terrible scenes I have attempted to portray, I have a notable lack of venomous feelings towards the various parties who are not conducting themselves as I would wish. The Director of Fisheries in Mexico, Dr. Jorge Carranza, who formally issues the turtle quotas, is an honorable, brutally overworked man, with whom I have a most cordial relationship. He has about ten minutes each week to think about turtles, and only then because a hundred protest letters from Europe and the United States have arrived on his desk the same morning that the cooperatives are straining at the bit to have the quotas increased. Antonio Suarez is a man I now consider a friend and I find few prospects more stimulating than that of an eight-hour dinner with Suarez at the elegant Estoril Restaurant as we pursue every nuance and implication of the Mexican turtle industry over a fine dinner and rare wine with Carlos Nagel suavely interceding with translation when the tempo gets too animated for me to keep up with the Spanish. And, I must also confess a sneaking admiration for the tough, blood-and-guts coastal people of Oaxaca, who know what it is like to be hungry, angry or passionate to a degree unknown to most closeted and comfortable members of middle class Western society—though I am also a little scared of them.

But somehow, between and among all of these people doing their thing, the turtles are losing out. I have described at length—perhaps even at sentimental length and in gory detail—what happens to turtles in Oaxaca, not just for the sake of being shocking for its own sake, but because the turtles are disappearing. Just a few years ago, arribadas in Oaxaca numbered as many as 100,000 turtles and took place five times in a season. Now they are down to 30,000 each time and are only seen two or three times in a season. Further north, the great arribadas of Jalisco and Guerrero have disappeared completely. The turtles are being killed in staggering numbers, both on their Mexican breeding grounds and in the feeding areas of Ecuador. They are killed for their leather—everything else is essentially by-product, even the meat—which is bought by thoughtless but by no means vicious people in Japan and southern Europe. It is my hope that such people will read this article and recognize that turtles do not yield their leather the same way a sheep yields its wool, but rather have it stripped from them after suffering a violent death at a stage of the species' life cycle at which it is most vulnerable.

In a way, my article is simply a testimony to an infinitely sad situation rather than a finger pointed at a villain whom I wish to overcome. As mankind proliferates over the face of the earth, in the long run spectacular concentrations of edible or valuable wildlife may be doomed to disappear. Perhaps the days of the Mexican arribadas were numbered when Cortez arrived, or even when the first Native Americans migrated into Mexico from the north. But the world's great wildlife spectacles should not be allowed to disappear without us at least thinking and worrying about it, and if enough of us worry, one of us may be smart enough to find a way to turn the clock back, to gain some time at least, to find economic alternatives for coastal Mexicans and to make good conservation not just a long-term economic imperative, but a short-term one as well, since governments, businessmen, and hungry people only understand the short term.

I learned a new word on my last trip to Oaxaca. In most places in Mexico, a massed return of female turtles to the nesting beach is called an arribada—which simply means

"arrival" in Spanish. However, in coastal Oaxaca, a different more romantic word, *Morriña*, is used. When I first heard the word it occurred to me that the scientific generic name of certain Burmese pond turtles, *Morenia*, was similarly pronounced, but that was purely an eclectic coincidence. Antonio Suarez explained that *Morriña* was not a word of widespread use in Mexico, but it came from the region of Galicia in Spain and it was used to denote a return to the fatherland by people who had spent a lifetime away from where they were born.

I asked Antonio what the etymology of the word was. He looked a little uneasy, and said he guessed it came from the word *morir*, meaning to die. The irony was not lost on me. While the homecoming of the elderly wandering Galician to his place of birth was in acceptance of death as the natural closing chapter in his life, the *Morriña* of the ridleys had no such harmony today. As they converged annually by the tens of thousands on the wild beautiful coast of Escobilla, their body chemistry and hormones are programmed, not for death, but for laying eggs deep in the sands of their natal beach, to perpetuate their kind before returning once again to their distant feeding grounds. It is only the brutal intervention of man that makes this journey a rendezvous with death rather than life for many thousands of the turtles, and gives a sinister literal meaning to the ancient and beautiful Galician word.

Since this chapter was written there have been some developments of interest. In November 1979 the World Sea Turtle Conservation Conference was held in Washington, D.C. Sponsored by a group of conservation organizations and U.S. federal agencies, this meeting brought together several hundred turtle specialists and interested parties from about 45 nations. Those who considered that study and conservation of turtles to be a small-time, obscure, or even droll pursuit were amazed to see the facilities of the headquarters of the U.S. State Department made available for a week of pure turtle talk, with extensive coverage by the national television networks.

In the interests of free-flow of ideas, I had proposed that some of those whose activities were thought by many or most to be prejudicial to sea turtles should be invited to speak and answer questions. My proposal proved controversial to the Scientific Advisory Committee for the Conference, but a compromise was reached to the effect that industrial representatives—specifically, the owners and managers of the Cayman Turtle Farm and Antonio Suarez—should have the opportunity to speak, but should not be given a formal place on the agenda.

Suarez, who months before had expressed interest in participating, was very wary by the time the conference started, and he was still in Mexico City. The prospect of facing hundreds of turtle conservationists on their home territory scared him. I urged him by phone to attend and assured him that I would personally intervene if anyone got nasty. I promised him an honest debate without rancor. Finally he agreed to fly to Washington.

Carlos Nagel and I met Suarez at the Watergate Hotel for breakfast. At one point in the conservation, I felt truly conspiratorial (perhaps because of our notorious location) when I realized that conservationist colleagues at an adjoining table had seen Suarez pass me a check for a fairly large sum of money. But it was innocent enough—the money was for the expenses of our Oaxaca turtle observers whom he had agreed to fund.

Suarez remained in his typical expansive, story-telling mood until the time came for him to speak publicly. The auditorium was packed with over 400 people, many of whom would have cheerfully processed Suarez through his own turtle packing plant.

Suarez proceeded to give a somewhat stilted account of his operation, in Spanish, with Carlos translating. He was clearly uneasy. His normal fluency was gone and he

answered questions in a curiously circumlocutory fashion. In answer to one question for some technical and numerical data, he gave an elaborate discourse on how he was merely the proprietor, not the scientist or statistician, for his business, and clearly he could not be expected to produce detailed statistics. Then with this preamble completed, he went on . . . "But it so happens that, in this particular case, I do have the information you need . . .", and he proceeded to answer the question.

Shortly after his presentation, I noticed Suarez in the lobby surrounded by men who turned out to be federal agents. One of them handed him a subpoena to appear in court in January in connection with the turtle meat smuggling case. Apparently he was not being directly accused of anything, but the feds wanted his signature to confirm acceptance of the subpoena.

Suarez, by now thoroughly alarmed and fearful for his continued liberty, was not about to sign anything. He handed the summons back, unsigned. This nonplussed the feds, who proceeded to tell him verbally where and when they wished him to appear. Suarez turned on his heels and left, taking a cab straight to the airport, leaving his right-hand man Alfredo Martinez to check his baggage out of his hotel.

Carlos followed in another taxi and managed to catch Suarez before his plane left for Mexico. Suarez thought we had lured him into the hands of the U.S. authorities deliberately, and was resentful and furious. It was a long time before we finally convinced him of our embarrassment at this breach of what we considered a visit under a flag of truce.

The second subsequent event of note took place in Mexico City in May 1980. Carlos and I were in the city to negotiate details of the permit for our Mexican Pacific green turtle conservation program; we took the opportunity of having lunch with Suarez, who had just returned from one of his regular trips to Spain.

It was clear as soon as we met Suarez that he had something urgent to tell us, but he wanted to wait until the setting and background were correct. He led us to a new and almost indecently luxurious restaurant in the Zona Rosa—a beautiful place, with antique brass bar rails, a cool sunken patio lined with splendid palms and ferns, and an elegant bathroom with a uniformed attendant to turn on the taps and pass the towels. The menu was vast, the food marvelous, the bill embarrassingly large, and the only disappointment was that the English trifle promised by the menu was not available.

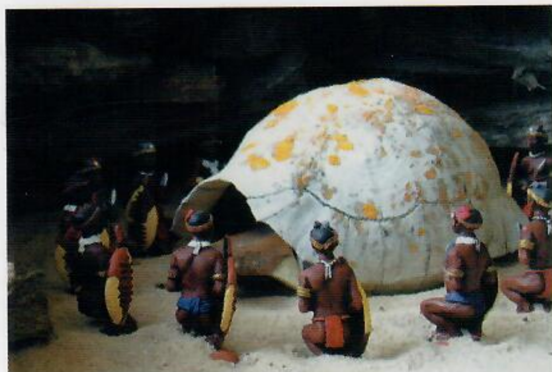
Suarez started with a strong but curiously passionless complaint that his good faith had not been reciprocated; that the American conservationists had led him into a trap; that he was now being unjustly accused of all sorts of crimes in the United States; and that clearly our dialogue had not solved the problems that he had hoped to solve.

I protested politely, reaffirming—as I often had—that we had nothing to do with his legal problems in the United States; that we had not breached good faith, but rather had honorably walked the difficult tightrope separating loyalty to him and loyalty to the turtles.

Suarez brushed this aside, neither accepting nor rejecting what he was hearing, just anxious to continue with what he had to say.

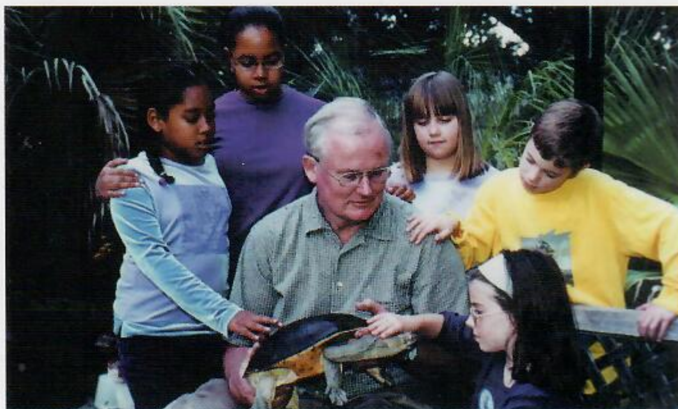
> . . . *so in view of these circumstances, and also because my beloved little daughter Fernanda asked me to do so, I have decided to leave the turtle business. I have sold PIOSA and my involvement with turtles has totally finished. I will be taking up tuna fishing instead and have ordered construction of two 1200 ton purse seiners with . . .*—and here his formal demeanor changed suddenly to a satanic grin . . . *nets specially designed to catch lots of marine mammals.*

ABOUT THE BOOK



TALES FROM THE THÉBAÏDE: Reflections of a Turtleman is a volume of scientific essays, personal adventures, autobiographical vignettes, and philosophical musings. It includes accounts of travel to many lands where Pritchard sought insight into the shelled reptiles. Several in-depth obituaries, including that of Florida's Archie Carr, are presented. Looking for tortoises in the Galápagos Islands makes up a major section, and there is a scholarly discourse on the taxonomic status of sea turtles. There is a long section on why he set up his personal "Thébaïde," the Chelonian Research Institute, and he thoroughly enjoys the zany, sometimes unbelievable players of the past who launched their own Cabinet of Curiosities. Pritchard's reflections encompass his love of life and his hope that his readers will share his delight in people, science, culture, conservation, argument, scholarship, and (of course) turtles.

ABOUT THE AUTHOR



Peter C.H. Pritchard, M.A., Ph.D. is best known as an authority on the biology and conservation of turtles and tortoises. Both before and after receiving his doctorate in 1969, he has undertaken extensive field work with turtles in all continents. He has established a permanent field station for turtle conservation in northwestern Guyana. Since 1998 he has been director of the Chelonian Research Institute in Oviedo, Florida, and is an adjunct professor of biology at Florida Atlantic University and the University of Central Florida. Dr. Pritchard has been recognized as a "Champion in the Wild" by the Discovery television channel, and a "Hero of the Planet" by *Time Magazine*. In 2001, he was declared "Floridian of the Year" by the *Orlando Sentinel* newspaper.

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