

EXCERPT

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The Green Turtle
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The world's most valuable reptile

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by

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The edible green turtle (*Chelonia mydas*), renowned among mid-latitude epicures, is an important protein food resource for the inhabitants of many tropical coasts. In most of the world it is prized for its flesh, but in Southeast Asia the meat is seldom eaten and instead the eggs, which are systematically harvested, form a significant adjunct to the local dietary. During the breeding season the adult green turtles congregate in sometimes prodigious numbers off selected beaches, characteristically on sparsely peopled islands, where the females deposit their eggs at night in the warm sand. This extraordinary homing instinct, as much as its morphological characteristics, distinguishes the green from other marine turtles. Although normally confined to the warm seas (temperatures above 20° C. in the coldest month), it is occasionally carried into cooler waters by drift currents or storms (see front endleaf map). Stray greens have been reported off the coasts of England and of New England, as they have off Argentina and Chile.

The countless Turtle Islands, Islas Tortugas, Iles Tortues, and Schildpad Eilanden of the tropical seas bear witness to the remarkably localized nesting activities which have made the species uniquely vulnerable at the hands of man. Today, in several areas, the green turtle is in trouble, its range and numbers having been sharply reduced by the unrelenting demand of a burgeoning human population and the continuing activities of the turtle hunters. Professor Archie Carr has observed that, although the green turtle is the most valuable reptile in the world, it would be difficult to name any animal comparable at once in economic importance and in depletion of its numbers that is so poorly known (33).

Alone among the marine turtles, the green turtle is a vegetarian, browsing on any of the several marine grasses (e.g., *Zostera*, *Thalassia*, *Enhalus*) that grow along the shoal margins of tropical seas, and to this is sometimes attributed the superior delicacy of its flesh. A mature female turtle normally weighs approximately 250 pounds, but individual specimens weighing as much as 700 to 800 pounds were not infrequently reported in the past, especially among the Ascension Island and Seychelles aggregations. Immature "chicken-turtles" weighing 25 to 50 pounds, however, tend to be the most prized by gourmets for steaks, but they are said to be too "watery" for good soup.

Taxonomists are not yet agreed as to the extent and significance of the differentiation between the Atlantic-Caribbean breeding populations and those of the Indo-Pacific region. Carr, in his *Handbook of Turtles*, distinguishes the Atlantic green turtle (*Chelonia mydas mydas*) from the East Pacific variety (*C.m. agassizii*), at least on a statistical basis, by the brownish coloration of the carapace and leg skin of the former and a slightly different conformation of the shell (32:345-65). The predominantly greenish or olive-brown *Chelonia* of the western Pacific has been distinguished from either of these as *C. m. japonica*. However, the geographical races of the species have never been subjected to morphological diagnosis and their classification remains highly tentative. Interchange of Indian Ocean and South Atlantic turtles around the Cape of Good Hope has probably always been possible, but this clearly has not been the case as between the Atlantic and the eastern Pacific populations. Karl Schmidt has pointed out, however, that the extreme differentiation within this wide-ranging species should not be expected between the east and west coasts of Central America, which were connected by one or more straits through most of Tertiary time (184). The major faunal barrier, he suggests, was more likely the great stretch of open water in the eastern Pacific between Polynesia and the

American coast. Genetic isolation between the sea turtles on the east side of the Atlantic and those of the tropical western Atlantic is a further possibility, though a less likely one in view of the proximity of the west coast of Africa and the east coast of Brazil.

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The habit of sun basking during daylight hours, reported from widely separated Pacific localities (Islas Revillagigedo, French Frigate Shoal, Galápagos, possibly Java), appears to be distinctive for this region, and there may be feeding and nesting traits as well that likewise distinguish one breeding aggregation from another.

These giant reptiles spend almost their entire life at sea, grazing on underwater pastures. Over most of their range only the adult female ever leaves the water and this she apparently does only at intervals of several years. Then, during the summer breeding season, she may lumber ashore during the night to deposit her clutch of 100 or more soft-shelled eggs the size of ping-pong balls in a hole she digs in the soft sand, her track, like a truck-tire tread, leaving telltale evidence to the egg hunters of her visit. This procedure is repeated four or five times at intervals of ten to fourteen days, while the males mill about in the water offshore. Eggs laid at a given visit to a beach are not the ones fertilized at that time but are probably fertilized three years before, or at the last previous nesting-mating rendezvous (40). At the end of the breeding season the troop apparently returns to its feeding grounds, which may be, as with the Ascension Island turtles, as much as 1,000 miles away. These remarkable migrations must have been going on for a very long time. Hendrickson, who has published a comprehen-

Her eggs laid, a female green turtle, weeping and sighing, makes her laborious return to the sea.

(TOM HARRISSON,
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sive study of the ecology of the green turtles of the Sarawak Turtle Islands, suggests that the unerring pin-point accuracy of their homing pattern may be attributable to "experience-memory" related to particular beaches that are associated with "satisfactory" nesting experiences. Thus, new beaches might come into favor. He believes that the majority of stray *Chelonia* nesting on atypical beaches in Malaysian waters are smaller in size than the average adult female and suggests that these may be newly matured individuals (106:461-62). With the single exception of that at Tortuguero, on the Caribbean side of Costa Rica, where a mainland beach is backed by extensive swamps, the largest breeding concentrations that have been recorded are found on uninhabited or sparsely populated islands. The type of beach characteristically favored seems to be steeply sloping, with a beach platform high above the flood tide, and composed of a lightweight sand of medium coarse texture that does not pack easily into a hard surface.


During the breeding season the turtles are easy prey to harpoon or spear as they drift on the surface of the sea preoccupied in copulation. On their feeding grounds when they periodically rise for air they become readily entangled in giant drift nets set by the turtle hunters. Sometimes they are wrestled into boats by strong swimmers with the aid of a rope looped around one of the front flippers, or, even more remarkably, they may be brought to gaff by a remora, or suckerfish, tied to a long leash, that attaches itself stoutly to the carapace of the feeding turtle (see Chapter 3). A wooden decoy, carved in the crude form of a turtle, is frequently employed in American waters to lure the males, which may readily be harpooned or netted as they hopefully attempt to mount the deceitful temptress. In Fiji there are fanciful stories of "turtle callers," elderly women whose chants lure the turtles out of the sea. But these creatures, it is said, cannot be tricked by professional turtle hunters. Wherever the females go ashore to lay they may be rendered helpless simply by being "turned turtle" on their backs as they lumber across the sand to or from their nests, which are above high tide and generally at least 100 feet from the shore. The eggs, which have an incubation period of about 53 days, are very likely to be stolen either by man or beast. Finally, the newly hatched baby turtles, although they instinctively scamper in a beeline for the sea, must run a gauntlet of waiting predators, such as wild dogs, raccoons, giant crabs, barracudas, sharks, and oceanic birds, from which only a lucky few survive. Considering the towering odds against it, the wonder is that the species has survived in such substantial, if dimin-

ished, numbers. "To understand something of the size of the green turtle populations (of the Caribbean) under primitive conditions," writes Carr, "is to wonder how the species can exist at all today . . . with such markedly different levels of concentrations of individuals" (32:354).

The sighing of the captive turtle, left wheezing and immobile on its back, and the great tears that ooze from its big eyes have given rise to pathetic and exaggerated accounts of the animal's suffering. Yet even when the female hauls up on the beach to lay its eggs it weeps profusely and sighs—the tears perhaps nature's way of keeping sand from caking in its eyes as it excavates its nest, the sighs an admission that the buoyancy of the water is sorely missed by a 300-pound creature that is not structurally designed for life ashore.

The only other tropical sea turtle of commercial importance is the hawksbill or caret (*Eretmochelys imbricata*), whose mottled and translucent shell is the "tortoise shell" of commerce. The hawksbill has been intensively exploited at least since Roman times, especially in the Indian Ocean and the South China Sea, but recently the market for the shell, long used for furniture veneer and inlay work and in the manufacture of articles of feminine adornment, has been largely taken over by celluloid and plastic substitutes. The eggs of the hawksbill are equally as esteemed as those of the green turtle, but, as this species generally lacks the highly developed homing instinct of the latter, their collection on a large scale is impractical. Its flesh, while appreciated by some tropical dwellers, has not found acceptance among Europeans.

The other common marine turtles, the loggerhead (*Caretta* spp.), the ridley (*Lepidochelys* spp.), and the trunkback or leatherback (*Dermochelys* spp.) are generally considered inedible. As these, too, have a pan-tropic distribution there is a certain amount of inevitable confusion in identity as between them, the hawksbill, and the green. Moreover, long-distance or mass breeding is common to all five genera of sea turtle. But for the men who know turtles or know the sea there is generally no mistaking *Chelonia mydas* with its distinctive markings both on the shell and head, its white underside or plastron, its social nesting habits, and, above all, its highly palatable flesh.



CULTURAL ATTITUDES TOWARD THE MEAT AND EGGS

The green turtle is exploited alone for its edible properties, its shell being considered worthless. The first Europeans who encountered it in the tropical seas thought of it chiefly as providing an antidote to scurvy and an *elixir vitae* of extra-

ordinary virtues. Later, especially in the West Indies, its flesh became a staple for both whites and slaves, either salted and buccaned or fresh. Baked turtle, the flesh often minced fine and cooked in its own shell, early became a plantation-house delicacy. Turtle oil, from any of several species, was used as a substitute for butter, as a lamp fuel, and as a lubricant.

By the mid-eighteenth-century a trade in live turtles had begun to develop between the West Indies and London, where green turtle and green-turtle soup were coming to have a prestige value among the well-to-do. "A plate of turtle, green and glutinous," the flavor and consistency of good veal, increasingly provided the *pièce de résistance* of diplomatic dinners and ceremonial banquets. The cartilaginous greenish substance that lines the shell, both the light-colored "calipee" and the darker "calipash," gave the soup the cherished gelatinous consistency. It was employed as part of the stock (this being made from the whole turtle, less the guts) and also was cut into small chunks and added as a garnish to each portion. Calipee and calipash are the unossified parts of the bellyplate and backbone. The calipash is widest in young turtles, for as they age the backbone extends to the edge of the shell. But the thickening with age of this layer of soft stuff tends to compensate for this change. Calipee, more abundant than calipash, is concentrated along the mid-strip of the bellyplate. The term "calipee," apparently of West Indian origin, was at first applied to the belly, or underside, of the turtle while the "calipash" was the upper side or carapace. By the nineteenth century these terms had come to be applied specifically to the delicately flavored gelatinous substance that comprises much of the lower and upper shells. On the Great Barrier Reef of Australia, however, it is otherwise. There "calipash" refers to the flesh attached to the lower shield and "calipee" to that obtained from the flippers, but this is contrary to the usage elsewhere (153:112). In preparing calipee and calipash for shipment, the shell was first cut into strips and boiled for several hours, after which the gelatinous matter was severed from the bony plate and dried in the sun. These stone-hard strips, looking like pieces of dried glue, have been exported under the name of "turtle strips," "calipee," or, less properly, "turtle fat" to mid-latitude markets for at least a century and a half. A large turtle may produce two and a half to three and a half pounds of it, the flesh being wasted if there is no local demand or refrigeration facilities.

As a symbol of Victorian opulence turtle soup was especially esteemed by nineteenth-century English and Ameri-

can aristocrats, a cherished luxury especially associated with the Lord Mayor's and aldermen's banquets. For the initiated it stood almost in a class by itself, like oysters, "to be approached with diffidence and reverence." While its prestige today is much reduced, there is still a substantial market for clear green-turtle soup among epicures. This, coupled with a growing demand for meat within the tropics, has led the few biologists who have studied it to express concern for the future of the species.

The sea turtle is sacred or held in special veneration by many peoples. In early China both the land tortoise and the sea turtle were symbolic of the good life and the long life and have always had a certain religious significance. Edward H. Shafer, of the Department of Oriental Languages of the University of California at Berkeley, informs me that the earliest Chinese literature is full of enthusiastic reports about the eating qualities of turtles. Most of these were apparently fresh-water species, but one ancient book, full of the South, the *Ch'u tz'u*, refers to the "broth of the sea turtle." We cannot be sure what species was used. The pharmacologists often recommended turtle broths and soups for their excellent tonic properties. The green turtle seems to have been less well known to the Chinese than the hawksbill. The early name of the former was *kou-pi*, a word that is unidentified in modern dictionaries of Chinese. Today it is referred to as *liu tzu-hsi*, "green sea turtle." Its flesh seems to have been especially prized. A commercial product called "[*kou-pi* skin," which was submitted as tribute to the Tang court by the city of Canton, could only have been calipee (186). It was described as being "extremely rich and savory." There is a ninth-century reference (*Ling piao lu i*) to sea turtles being common off the Kwantung coast; men could ride on their backs. There is also reference to a "kou-pi islet" on the way to Liu-ch'iu (Formosa?). The green turtle is said still to nest occasionally on some of the small islands south of Hong Kong (108).

Both in Asia and in the Americas the turtle was one of the mythical animals on which the world was believed to rest. The Burmese are said to consider sea turtles divine, keeping them in tanks in pagoda grounds where they are fed special foods. Among the north Australian aborigines the sea turtle is one of the principal totems. Pliny wrote of a cave-dwelling people at the entrance to the Red Sea who, although they were *Chelonophages* ("turtle eaters"), worshipped the turtle as sacred. Among many groups extraordinary medicinal virtues are attributed to the oil of turtle. It is perhaps not surprising, then, that the eating of turtle flesh is taboo among

several peoples and of ceremonial significance among others. For example, the flesh of sea turtles seems not to be consumed by most Burmese, Thai, or Malays. In its stead these people have traditionally and intensively exploited the nearby turtle islands for the eggs, seemingly with little impact on the size of the permanent populations. Hendrickson has suggested that the concentration on egg collecting and the consequent protection of living turtles as providers of eggs have been more effective means of species conservation than the more common prohibition against the taking of eggs (106:525). This proposition seems to be borne out in the survey of the world's green-turtle nesting beaches in the pages that follow. On the turtle beaches that have had their stock most reduced, meat not eggs has been the principal object of exploitation.

In Southeast Asia the avoidance of sea-turtle flesh is sometimes held to be a Muslim trait. For example, Thomas Forrest, in Indonesian waters nearly 200 years ago, wrote that "some of my people, who were not Muslims and eat turtle, cut the meat up small and stewed it in green bamboos" (71:126). However, it does not appear to be followed by the Muslim population of East Africa and Arabia. There appears to be nothing in the Koran that specifically forbids the eating of sea turtles. Moreover, the avoidance of sea-turtle flesh, though apparently not tortoise flesh, seems to be as characteristic of most coastal peoples of Burma and Thailand as of the Malays, suggesting that it may well be a pre-Muslim attitude of considerable geographic extent. Hendrickson is of this opinion (106:457-58). According to Theobald, "land and freshwater testudinata are a favorite article of food of all classes in Burma, save such as have embraced Islam, or Jews." But marine turtles, he noted, were generally not molested except for their eggs (203:8). Tandy also notes that land and river tortoises are valued by the Burmese for both flesh and eggs, but he makes no mention of sea turtles (202:155). Among the modern Thai the eating of turtle is considered unthinkable, although they may eat poultry, pork, and beef with relish. But this taboo seems not to extend to India. Paul Wheatley has pointed out to me that turtle and tortoise flesh were both being served at banquets in royal courts in the Kelantan Valley, Malaya, early in the seventh century, where the rituals, pageantry, and protocol were of Hindu character.

In China and India, as well as among Southeast Asia's Chinese and Indian populations and the Hindu-influenced Balinese, turtle flesh is highly regarded. Field biologists in Malaya and Sarawak, on the other hand, have found that popular attitudes against killing of adult animals are so



strong as to make it impossible to study food habits or intestinal parasites of turtles or to carry out other projects which demand the sacrifice and dissection of the creatures. This avoidance of turtle flesh most often seems to stem from the peculiarly high esteem in which sea turtles are held in this part of the world. Thus, in the Maldivé Archipelago, where sea turtles abound, J. Stanley Gardiner reports that they are not eaten because the natives believe "they suckled Kom-burani when he hauled up the islands from the deep with his fish-hook" (75:2:1050). François Pyrard, more than 200 years earlier than Gardiner, had noted that turtle flesh was taboo among Maldivians "because, they say, this animal has some kind of conformity and kinship with man" (171:80:348-49).

Some native American groups seem likewise to have avoided turtle meat, perhaps in a sort of subconscious recognition of the species' vulnerability to man. Rochefort, for example, clearly stated that the Caribs of the Lesser Antilles originally did not eat turtle meat, being fearful of taking on the characteristics of that reptile (179:2:202-3). Yet they relished the eggs. On the west coast of Central America, and in Brazil too, some early accounts suggest that eggs or oil, rather than meat, were the primary interest of at least some aboriginal groups.

"Semah" turtle fertility rites at Talang Talang Besar, Sarawak.

(TOM HARRISON,
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In Africa similar avoidance patterns probably existed. On the east coast, for example, the Cushite peoples of Somaliland are still today said to disdain sea-turtle flesh (95:126). In Mauritania, according to Villiers, it is especially the food of the lower classes (224:93). The Imragen Moors of Arguin in Mauritania were described by Valentin Fernandes in the sixteenth century as living largely on sea turtles (224:76).

The Europeans who first came into contact with the green turtle were not of one accord in their judgments of it. Some asserted it to be a delicious and healthful food, while others held that it was poisonous. It was generally the English who were most enthusiastic in their praise of the green turtle's virtues, perhaps because they knew it best. As a cure for scurvy and a relief from the monotony of a hardtack and salt beef diet it was much prized by the early explorers and buccaneers. George Woodbury suggests that the green turtle as much as any other natural factor was responsible for the opening up of the Caribbean and the concentration of piratical activities in that part of the world (237:106-10; see also 33:17). The great clumsy creatures were easy to catch, abundant, nourishing, and most important of all in the tropics before refrigeration, could be kept alive for weeks. William Dampier, that rough seaman who, Oliver Goldsmith observed, had added more to natural history than half of the philosophers who went before him, made repeated and extensive reference to turtles in his *Voyages*, written between 1681 and 1688. To men of his ilk the facts of green-turtle geography were of prime significance. He was the first to make clear the distinction between the edible green turtle and the other, less palatable species, especially the hawksbill and the loggerhead.

The health-giving qualities of *Chelonia mydas* were much commented on by observers of the seventeenth and eighteenth centuries. John Fryer, to whom it was "neither fish nor fowl nor good red herring," observed that "it restores vigor to the body, giving it a grace and luster as elegant as viper wine does consumptive persons and worn out prostitutes" (73:306). Indeed, many an ill-disposed Englishman on Jamaica went to the Cayman Islands during the turtling season to recover his health feasting on turtle (53:2:399). Syphilitic patients are said to have been sent to the Cape Verde Islands from Portugal for the same purpose (190:225). Both flesh and eggs were reported to be slightly aphrodisiac, and still are considered so among some peoples.

Turtle was in as great demand as a slave food in the West Indian colonies in the seventeenth and eighteenth centuries as was salt cod from Newfoundland. Gradually the reptile was

taken up by the West Indian white aristocracy. It was considered a special delicacy when eaten fresh. "To eat this animal in the highest perfection," wrote Oliver Goldsmith, "instead of bringing the turtle to the epicure, he ought to be transported to the turtle" (82:674). Janet Schaw, writing of her visit to Antigua in 1774-76, said, "I have now seen turtle almost every day, and tho I never could eat it at home, am vastly fond of it here, where it is indeed a very different thing. You get nothing but old ones there [London], the 'chickens' being unable to stand the voyage; and even these are starved, or at best fed on coarse and improper food. Here they are young, tender, fresh from the water, where they feed as delicately and are as great epicures as those who feed on them. . . . Could an alderman of true taste conceive the difference between [turtle soup] here and in the city, he would make the voyage on purpose, and I fancy . . . into the other world before he left the table" (183:95).

The special quality of turtle soup was said to be that it did not "cloy." In other words, one could eat almost any quantity of it without ill effects. Its easily assimilated proteins, without carbohydrate or fat, were said to prepare the stomach in superb fashion for what was to come. When banquets started with this soup, the diner was considered best able to enjoy the numerous rich dishes to follow. Goldsmith wrote that turtle "has become a favorite food of those who are desirous of eating a great deal without surfeiting . . . by the importation of it alive among us, gluttony is freed from one of its greatest restraints" (82:674). The soup, flavored with sherry, capsicums, ginger, cloves, and nutmegs, and served piping hot, was considered at its fiery best "when, after having eaten, one is obliged to rest with his mouth wide open, and cool the fevered palate with Madeira or Port" (189:366). In twenty years in the West Indies, one doctor professed, he had never heard of an "accident" arising from eating it! It was also held to be an ideal food for convalescents, especially when served in jellied form.

The Dutch, although they partook of it, seem to have been rather indifferent to turtle, in the East perhaps because of their close association with the Malays, who avoided the meat. The French, although interested, found but a limited supply of green turtle (*tortue franche*) available to them, most of the best turtling grounds being under English control. From the seventeenth-century account of Père Labat, the Dominican monk, of the many ways of preparing turtle that he observed in the manor houses of Martinique and Guadeloupe, it is evident that its merit was not unrecognized (125:1:61-62, 137-38). Yet it did not rate so much as a mention in Brillat-

Savarin's exhaustive *Physiologie du goût*, written in 1825. That the French thought of it as an English dish is suggested by the account of it in the nineteenth-century Larousse dictionary. "Like all people, says Grimod de la Raynière, the English possess some national ragouts which they esteem more through the spirit of patriotism than through conviction and the French, lovers of novelty and ever ready to judge their neighbor's possessions above their own, have the kindness to envy them. Such is turtle soup" (128:324). While he considered the reputation of English turtle soup fully justified, the French cuisine critic Alfred Suzanne wrote in 1904 that the green fat was esteemed by London connoisseurs more for its rarity than for its taste. As for the meat, he judged it a little dry, sometimes having a slightly disagreeable fishy flavor. In France, he noted, turtle soup was still scarcely known but by name, while in England and America it had an enormous consumption (201:12).

In contrast to the north Europeans, both the Spaniards and the Portuguese were for the most part singularly disinterested in turtle. After the middle of the sixteenth century their chronicles are generally silent regarding its occurrence and use. Sometimes there is evidence of a positive prejudice against eating the flesh, perhaps a reflection of native Indian attitudes which they encountered on the mainland. It is noteworthy that the English in the Antilles were not generally in direct contact with Indian populations, while on the mainland the Miskitos of Central America, their principal associates, were extraordinarily avid turtlers and turtle eaters.

Cadamosto, the first Portuguese to mention what must have been the green turtle, fed it to his crew at the Cape Verde Islands in 1456 and found it palatable (30:65). Oviedo, in his *Historia Natural*, called it "good and healthful food" (163:111). Indeed, prior to the arrival in force of the English, the Spaniards seem to have had considerable respect for green-turtle meat as a food. In his late sixteenth-century account of Cuba, Fray Alonso Ponce (169b:2:373) remarks on the many small boats that came to the port of Havana loaded with large turtles that had been harpooned off the coast. They were kept in staked pens in the harbor to await buyers. Thomas Gage, the English Jesuit, who was in the New World from 1625 to 1637, observed of Havana that "all ships make their provision for Spain of tortoise meat [there]. They cut the tortoises in long thin slices . . . and dry it in the wind after they have well salted it, and so it serveth the mariners in all their voyages to Spain, and they boiled it with a little garlic, and I have heard them say that to them it tasted as well as any veal" (206a:334). Elsewhere he wrote of his

voyage to America: "We fed for the first week [in the West Indies] upon almost nothing but tortoise. . . . Our Spaniards made with them an excellent broth with all sorts of spices. . . . Thus, our hens, our sheep, and our powdered beef, and gammons of bacon, which we brought from Spain, were some days slighted, while with greedy stomachs we fell hard on our sea veal" (206a:28). Clearly, the Spaniards' prejudice against turtle meat that was later so evident had not yet taken hold. Most Spanish and Portuguese writers, however, ignored it.

Dampier, describing the turtles found on the Brazilian coast, wrote in 1699: "neither the Spaniards nor Portuguese lov(e) them; Nay they have a great antipathy against them, and would rather eat a porpoise, tho' our English count the green turtle very extraordinary food. The reason that is commonly given in the West Indies for the Spaniards not caring to eat them is the fear they have lest, being usually foul-bodied, and many of them pox'd (lying as they do so promiscuously with their Negrines and other She-slaves) they should break out loathsomely like lepers; which this sort of food, 'tis said, does much incline men to do, searching the body and driving out any such gross humours" (53:2:399). Richard Walter, who was with Lord Anson on his voyage around the world, writing in 1748, thought it strange, considering the scarcity of provisions on the Pacific Coast of Central America, "that a species of food so very palatable and salubrious as turtle should be proscribed by the Spaniards as unwholesome and little less than poisonous. Perhaps the strange appearance of this animal may have been the foundation of this ridiculous and superstitious aversion, which is strongly rooted in all of the inhabitants of this coast." Of the Indians and Negroes, slaves of the Spaniards, that they had taken as prizes in Peru, he noted: "These poor people being possessed with the prejudices of the country they came from, were astonished at our feeding on turtle and seemed fully persuaded that it would soon destroy us . . . it was with great reluctance and very sparingly that they first began to eat it; but the relish improving upon them by degrees, they at last grew extremely fond of it, and preferred it to every other kind of food . . . a food more luxurious to the palate than any their haughty Lords and Masters could indulge in . . ." (226:208).

One may ask, of course, whether the Spaniards' apparent disinterest in turtle may not have been in part a reaction to the close identification of it with the rival and hated English. Frederick Simoons, in his study of Old World food prejudices, has shown the frequency with which particular animals or foods have become identified with particular ethnic, religious, or other groups through the course of history. The tendency

to identify peoples with distinctive food habits is only a step from the rejection of foods simply because they are associated with a rival group. The pastoralists' rejection of the pig, an animal closely associated with and symbolic of the settled farmer, seems to be an extreme, but by no means isolated, example of this sort of attitude (191:106-25).

Even today the turtle is relatively little exploited among the descendants of the Spaniards and Portuguese in tropical America. The commercial turtlers in the Caribbean are for the most part English-speaking whites from the Cayman Islands, while the principal local markets for turtle meat are in the Negroid mainland towns such as Colón, Limón, Bluefields, and Belize where English-speaking Protestants of West Indian ancestry predominate (165).