Exploitation of Reptiles in the West Indies: A Long History

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Abundant remains of sea turtles, tortoises, iguanas, and even snakes in archaeological excavations throughout the West Indies testify eloquently to the fact that Amerindians frequently and successfully exploited reptiles. At least some biogeographers have suggested that the first human inhabitants of the region carried with them favored species, such as Red-footed Tortoises (*Geochelone carbonaria*), establishing populations on islands as they migrated north from South America to serve as a ready source of food during subsequent visits[1]. Aboriginal inhabitants have been implicated in the introduction of iguanas on islands in the Gulf of California (see *Iguana Times*, June 2002) and also may have established some West Indian populations. Furthermore, the earliest Americans have been blamed for the extinction or extirpation of

A mongoose (*Herpestes javanicus*) from Savane-à-Mulets, Soufrière, Guadeloupe. These efficient predators have been implicated in the extirpation of populations and even the extinction of diurnally active snakes and ground-dwelling lizards (photograph by Alain Fossé).

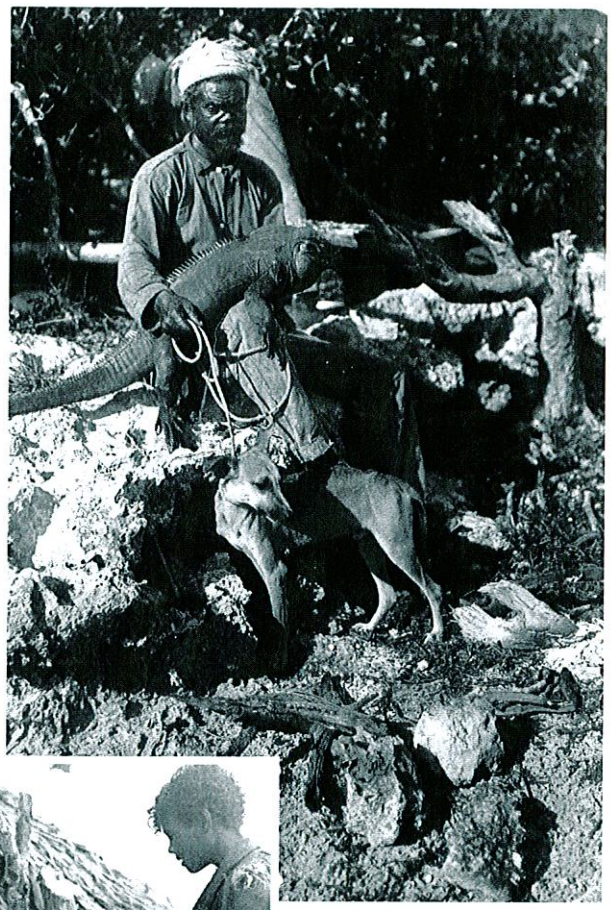
[1] Some authorities, noting the abundance of tortoises on oceanic islands, their ability to float, and their resistance to exposure to salt water, disagree and argue that Red-footed Tortoises arrived naturally in the islands by means of overwater dispersal from South America.

Today, the American Crocodile (*Crocodylus acutus*) is endangered, but in the early 20th Century, exploiting the species for hides and meat was widespread and "officically" sanctioned. Here, convicts skin a crocodile in the Dominican Republic in 1922 (photograph by G. K. Noble; courtesy of the Department of Library Services, American Museum of Natural History).

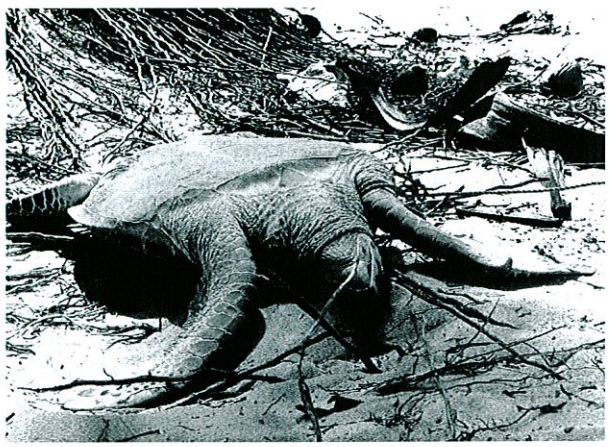
native tortoises and some populations of iguanas (along with a number of large, endemic mammals) that are known only from fossil or archaeological evidence. If true, exploitation of at least some species was not sustainable — and the popular image of Native Americans living in harmony with nature clashes with reality.

The West Indies have been exposed continuously to Europeans longer than any other region of the Western Hemisphere. Columbus spoke of abundant turtles and iguanas, and, beyond any doubt, he, his men, and those that followed considered them resplendent table fare. With the advent of the slave trade, Africans, most of whom were products of cultures that exploited wildlife in their native lands, continued to do so in the New World. Like the Amerindians before them, West Indians of European and African descent are blamed for translocations, extirpations, and extinctions. Although many of the latter are attributable to habitat alteration and destruction or competition with and predation by feral mammals, exploitation levels were undoubtedly high — and often have exceeded sustainable levels into recent decades.

Food undoubtedly has been the primary motivating factor. Most large reptiles, especially those that evolved on islands in the absence of large predators, were at least initially abundant — and are easy to catch, nutritious, and tasty (note the obvious reference in the name *Iguana delicatissima*, for example). Even easier to acquire are the eggs of turtles, iguanas, and crocodilians. In addition, however, turtle shells and bones of many large species were used as tools. Shells and hides were used for the construction of shelters or for decorative purposes, and some animals or their parts became important in ceremonial functions. Snakes still play a significant role, for example, in voodoo rituals. Crocodilian penises and some



In 1922, Iguana hunters on Isla Beata, Dominican Republic, used dogs to catch Hispaniolan Rhinoceros Iguanas (*Cyclura cornuta*) (photographs by G. K. Noble; courtesy of the Department of Library Services, American Museum of Natural History).



A Green Turtle (*Chelonia mydas*) awaits slaughter on the beach of Isla Saona, Dominican Republic (photograph by Robert W. Henderson).

This snake hunter was photographed on St. Lucia in 1888. The snake is *Bothrops caribbaeus* and it may have been killed for a bounty, or merely because it was a snake and potentially dangerous (photograph courtesy of Philip Walwyn).

internal organs were thought to possess aphrodisiacal properties.

Exacerbating the impact of exploitation for useful purposes were efforts at extirpation motivated by fear or dislike. On Martinique and St. Lucia, the only West Indian islands with native populations of pitvipers, these are hunted actively, and bounties have been offered intermittently by the authorities until recent years. On many islands where no species are dangerous to humans, snakes nevertheless are killed whenever encountered. Crocodilians are widely feared and killed, often without any effort to salvage the meat or other useful parts. Even on the few islands on which humans have not traditionally eaten iguanas, they (and other species of large lizards) are frequently persecuted solely because they are perceived as being ugly and strange.

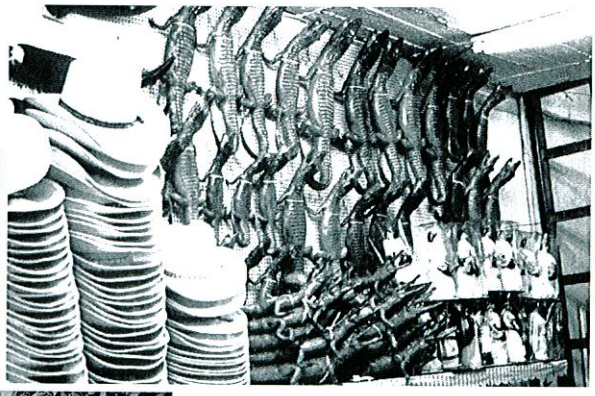
Although presented in a historical context, many of these practices continue largely unabated today, despite the protected status of many species. Shells of sea turtles are piled high in many ports, and freshwater turtles and iguanas show up regularly in small towns or even city markets. Especially people living in rural areas routinely supplement their diets with reptilian meat and eggs. Fear of snakes, large lizards, and crocodilians remains responsible for the deaths of many reptiles throughout the region.

However, in addition to the traditional reasons for exploiting reptiles, one of the most pervasive causes of local extirpations today is unregulated collection for the burgeoning pet trade. Authorities in essentially every island nation can cite example after example of unscrupulous collectors catching, buying, and smuggling enormous numbers of reptiles of all sizes and species — and these commercial collectors are, of course, only those that have been caught. Strangely enough, scientific collectors in the 19th and early 20th centuries initially developed a common practice employed today by these criminals[2]. Offering bounties to locals eager to supplement their meager incomes and often very familiar with the habits of the local species, scientists historically and, now, suppliers to the pet trade harvest huge numbers of animals. The fact that rarities demand the highest prices imposes particularly intense pressure on populations of threatened or endangered species. To their credit, today's scientists have largely abandoned this practice.

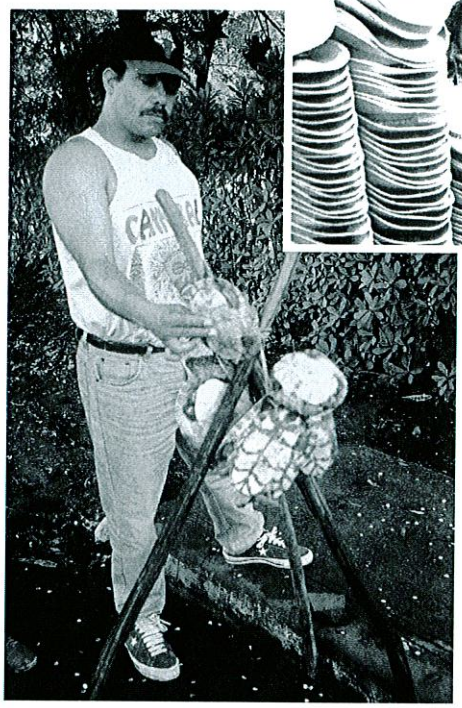
What, if anything, is being done? Legislation now protects many of the most vulnerable species and some habitats, but enforcement is lax or nonexistent in many cases. Educational efforts on many islands have had some positive impact, par-

[2] Scientific collecting has not been implicated in any extirpations or extinctions of West Indian reptiles and the knowledge acquired by scientists who take specimens for academic purposes often has been invaluable in developing conservation strategies for specific species or entire biotic communities.

ticularly when coupled with successful efforts at developing ecotourism. Animals become more valuable as means of attracting free-spending tourists than they would be in the market. Unfortunately, education takes time and, in many cases, is directed at children. By the time they are in a position to develop, implement, and enforce enlightened policies, many additional populations and even species of reptiles will have disappeared. Even ecotourism has its drawbacks, since many travelers supposedly enamoured with wildlife buy curios made from exploited reptiles and demand accommodations and amenities that are incompatible with sustaining viable natural habitats.



Hatchling American Crocodiles (*Crocodylus acutus*) offered for sale to tourists in a shop in Santo Domingo, Dominican Republic (photograph by Donald D. Smith).



A roadside vendor selling "Jicotecas" (*Trachemys stejnegeri*) collected in the Laguna de Saladillo, Parque Nacional Montecristi, Dominican Republic (photograph by Robert Powell).

What can any one individual do? One should abide by all legislated efforts to conserve nature, avoid all actions that might in any way encourage the exploitation of wildlife, support educational efforts by governmental agencies and non-governmental organizations, if a pet reptile is to be purchased, select only captive-bred animals from known sources, and travel lightly on the land when in the islands.

Acknowledgements

Robert Henderson's comments on an early draft improved this article immensely.

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Note that the references listed below are surveys that, in turn, provide citations to many additional pertinent resources, as do the volumes in which they appear.

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Adult male St. Lucian Iguana (*Iguana iguana*) (story on p. 71). *Photograph by Matt Morton, Durrell Wildlife Conservation Trust.*