

Cayman Turtle Farm: One of a Kind in the World!

Story and Photos by Sharlene S. Branham
OZS Executive Director

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WHEN mother and I awakened on the *SunViking* ship, we saw one of the most beautiful islands in the Caribbean: Grand Cayman. The island is situated 500 miles south of Miami and 200 miles northwest of Jamaica, from where we had just sailed the day before.

Cayman Turtle Farm Limited is located on the northwest point of Grand Cayman. It is indeed unique, the only one of its kind in the world. These islands, with their beautiful, crystal clear water and year-round temperatures of 75-80°F, offer a suitable habitat for sea turtles.

In 1503, Christopher Columbus visited Cayman, and the name has been synonymous with that of the sea turtle ever since. Early visitors found no people, but an abundance of green sea turtles. The Cayman turtles became the regular source of fresh meat for the Caribbean seamen and, in later years, for the early settlers. Columbus noted such an abundance of turtles in the native waters that he first named Cayman "Las Tortugas" — or "The Turtles". So important through the centuries have the turtles been for Cayman that the coat of arms of this British Crown Colony carries a sea turtle.

Today Cayman Turtle Farm contributes substantially to the economy of the Cayman Islands. The commercial history of the sea turtle did not, however, come into being until nearly 100 years after Columbus' discovery when a pirate captain, William King, landed in Cayman and found that the eggs of one turtle would "feed ten men for a day."

Seamen soon learned that they could carry turtles on board and enjoy fresh meat at sea, and entrepreneurs soon realized the money making possibilities of turtle products. They began ranging over the Caribbean, hunting the slow-moving creatures, and for scores of years this marketing of turtles and their by-products continued, decimating the

turtle population with near disastrous results.

Reproduction in sea turtles is a fascinating and complex subject, and is not fully understood. Their existence in the wild is still a mystery. During the breeding season, the mature turtles return thousands of miles to exactly the same beaches where they themselves started life. There is a complex courting procedure. Male and female will mate sometimes for periods of up to 52 hours. In the wild, the females leave the water only at night to lay their eggs; the males never go on shore. The large females slowly and laboriously make their way to the beach and then begin to scoop a hole with their rear flippers. Sometimes the turtle digs the nest in such a position that it becomes washed out by the tide.

The soft-shelled eggs, on an average of 100 per nest, are deposited in the hole and the nest covered with sand. The female will do this about four times in a season, usually about 10 days apart. The eggs deposited on the beach are subject to heavy predation.

After hatching, the baby turtles struggle to the sea. It is a hazardous journey. Crabs and birds take a heavy toll and, once they reach the surf, fishes, including sharks, kill the majority of those that have survived the journey. Less than one percent of all turtle hatchlings survive in the wild.

The turtling industry in Cayman came full circle in 1968 when a Miami-based marine biologist and an associate formed Mariculture, Ltd., the first and only commercial turtle farm in the world. This venture changed hands and is now known as the Cayman Turtle Farm.

At the farm, the mating season occurs between April and July. Nesting follows in about two weeks and is repeated several times. There are two man-made beaches at the farm, constructed to simulate nature as much as possible and to be used for egg-laying

by the female turtles. After the eggs are laid, they are immediately removed to the safety of the hatchery where, after approximately 60 days, healthy young turtles emerge. Incubation methods are put into practice, including temperature control, humidity and oxygen supply.

After hatching, the baby turtles are not ready for the water until they have absorbed their yolk sacs. This takes about three days. They are kept at the hatchery, then brought to the small tanks where they immediately begin to swim. They are kept in this tank until they are six months old. In the first months of life, the dark black and white belly color serves as a protective mechanism, making the little turtles difficult to detect by their predators.

When the turtle grows older, the wonderful variety of shell patterns and color begin to emerge. The length of the back shell can be a rough guide for the observer as to the age of the turtle. A 10-inch back shell would indicate a one-year-old turtle, a 15-inch shell 18 months, and a 20-inch shell three years.

At the farm, turtles are fed on a pelleted high-protein food, using fish meal and soy beans as a base. It varies in size according to the age of the turtles. The food has the capacity to float to make for easier feeding.

In 1978, the United States, which provided the market for about 85 percent of the farm's products, enacted legislation making it illegal to import turtle products into the country. But turtles are still being born and raised at the farm, and large numbers are being fed in Cayman waters. In October 1980, farm officials released some 2,000 turtles, and an additional 10,000 were released in 1981. The farm, rather than retreating "into a shell," is making plans to expand operations by construction of a gallery where they live.

If you have the opportunity to visit the island of Grand Cayman, put a visit to the farm at the top of your list.



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SCIENCE



ROSEOLO SPOONBILL (above) and GREAT or AMERICAN EGRET (below)



(PHOTOS BY STEVE CLEVENGER)

ROOKERY AT PORT LA VACA



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COVER PHOTO:

Spoonbills and Herons at Port La Vaca Rookery
Photo by Steve Clevenger