

THE CAYMAN ISLAND ROCK IGUANA, *CYCLURA NUBILA CAYMANENSIS*

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On a very small island in the western Caribbean lives a modern-day "dragon". It is truly a giant among lizards, reaching a length of over four feet and a weight of almost 15 pounds. This qualifies the Cayman Island Rock Iguana *Cyclura nubila caymanensis* as one of the largest lizards in the Western Hemisphere.

These rock iguanas inhabit the two smaller islands in the Cayman Island group: Little Cayman and Cayman Brac. They lie approximately eighty miles south of Cuba and a little over one hundred miles west of Jamaica. The islands in this group are formed of limestone and are generally quite flat, with the highest points only about forty feet above sea level. Cayman Brac is an exception; with a bluff rising to one-hundred and sixty feet above sea level at its north-east end.

Little Cayman is the only island that still has viable populations of rock iguanas, certainly because it is the least human-populated of the group, with fewer than forty residents. Its entire land area is about twelve square miles, much of which consists of mangrove swamp and inland lakes. Although unsuitable habitat for iguanas, these areas harbor huge nesting colonies of sea birds, including Magnificent Frigate birds and Red-footed Boobies. The rock iguanas inhabit only the more open, arid sections of the island. These are covered chiefly by xeric limestone forest.

The genus to which these rock iguanas belong is *Cyclura*, a group of iguanas confined to a number of islands in the West Indies. Their closest living relative is possibly *Ctenosaura* of Mexico and Central America. From a common ancestor these rock iguanas developed into morphologically different forms on each isolated island group. Some evolved into only medium-sized lizards two to three feet in total length. Others, like the Cayman Rock Iguanas, developed into massive creatures; in fact, they are the largest surviving native land vertebrates in the Greater Antilles.

The rock iguanas flourished until men colonized the islands within the past few centuries. They hunted the lizards for food and destroyed their habitat. They brought to these islands rats, pigs, and mongoose which destroyed the iguana's eggs. Their domestic dogs and cats became feral and preyed upon young iguanas. Goats roamed many islands, decimating the vegetation that provided iguanas with cover and food. In recent years, the demand for specimens to supply collectors abroad reduced populations still further. Roads were built around the islands which effectively cut the iguanas off from their best feeding and nesting areas.

Of the seventeen morphologically different forms now recognized; one is believed extinct, several others are very much endangered, and the rest have been split into small scattered populations whose state is questionable in most cases.

The numbers of rock iguanas on Little Cayman Island have been steadily declining in recent years. The bulk of the population has retreated into the more isolated, almost inaccessible, interior of the island. Here they spend their days moving in and out of the mosaic of light and darkness, thus regulating their body temperature. The limestone comprising these islands is of a honeycombed variety known as Microkarst. Rock iguanas utilize the numerous cavities as overnight retreats, and each normally requires several different holes. They are rarely far from shelter. Rock iguanas usually emerge from these retreats on sunny days when temperatures approach 80°F. Juveniles are the first to be seen, with the adults appearing somewhat later.



Little Cayman Rock Iguana, *Cyclura nubila caymanensis* (male) on Little Cayman Island. David. W. Blair photo.

After basking in direct sunlight for up to an hour, they begin to move about and feed. Primarily herbivorous, rock iguanas also consume some animal matter. Since they are not active predators, only easily obtained items are sought, such as insect larvae, landcrabs, and carrion. Young iguanas can sometimes be induced to take food from your hand and seem especially fond of flower blossoms, including Oleander and Poinciana. Adult males by contrast are very wary and usually dash into the nearest retreat at the first sight of a human's approach. By setting up blinds in the field we were able to observe and photograph huge males at close range. The blinds appeared to be completely ignored by the iguanas after only one or two days in place.

Male rock iguanas are very powerfully built with a massive head and large jowls. The blood-red sclera of the eye gives them a somewhat vicious appearance; but in reality, they are shy, peaceful creatures. Their markings are distinctive, with alternating bands of black and yellow-brown. Females tend to be solid gray or brown with faint banding and black fore-feet in sharp contrast to the legs.

Little is known concerning the reproduction of Cayman Island Rock Iguanas in the wild. C. Bernard Lewis observed iguanas on Little Cayman for four weeks in 1938 and provides most of the information available to date. He stated that egg-laying takes place in May and June, with from 8 to 20 eggs deposited in the sand near the beach. Burrows up to four feet long and a foot deep are dug under bushes only a few yards above the high tide mark. We spoke with current long-term residents of Little Cayman and were told that they sometimes saw iguanas nesting on the south shore of the island. The eggs were often dug up and eaten by natives, as they sometimes mistook them for sea turtle eggs.

The late Ira Thompson, a native Caymanian and one of the islands' leading naturalists, raised the closely related Grand Cayman Rock Iguana (*Cyclura nubila lewisi*) in captivity for over 30 years. The information he recorded is probably indicative of the patterns shown by other members of the species. He found that mating usually takes place in March and April, with egg-laying occurring in May and June. Nine to sixteen eggs are laid after nests are dug. Nest preparation may require several days. Females normally guard the nests for up to two weeks because in the wild, prime nesting sites are at a premium, and are often disturbed by other gravid females. Hatching occurs in September after approximately 90 days incubation, and hatchlings are 10 or 11 inches in length. Rock Iguanas reach maturity at about five or six years of age. It is possible that these iguanas may live to be 50 to 80 years old.

Cayman Island Rock Iguanas are still "hanging-on" in the wild, but were almost dealt a devastating blow in recent years. In 1977, an agreement was signed between the Cayman government and Cayman Energies Ltd. calling for the construction of a ten-million barrel oil transshipment terminal on tiny Little Cayman Island. Fortunately the plan has been "indefinitely postponed" for this would have meant the influx of over 600 workers for construction with 200 remaining in permanent positions. If implemented this would have had a disastrous effect on not only the iguanas, but the entire ecology of the island.

Two species of birds have already become extinct on Grand Cayman in recent years. We can only hope that the Cayman Island Rock Iguanas do not follow in their footsteps. Through intelligent management, conservation, and intensive public education we can preserve this very special island and it's unique inhabitants for generations to come.

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Little Cayman Rock Iguana, *Cyclura nubila caymanensis* (female). David W. Blair photo.

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Hatchling Cuban Rock Iguana, *Cyclura nubila*

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