

Recording a nesting site of *Cyclura nubila nubila* in Guanahacabibes National Park, Cuba

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This report describes a nesting site of *Cyclura nubila nubila* in the coastal area of Guanahacabibes National Park, in westernmost Pinar del Río Province, Cuba (Figure 1). According to Christian (1986), the Cuban Iguana is extremely secretive (less evident nests); as to its nesting and defense of its nest, it is very variable and less vigorous than the other species of *Cyclura*.

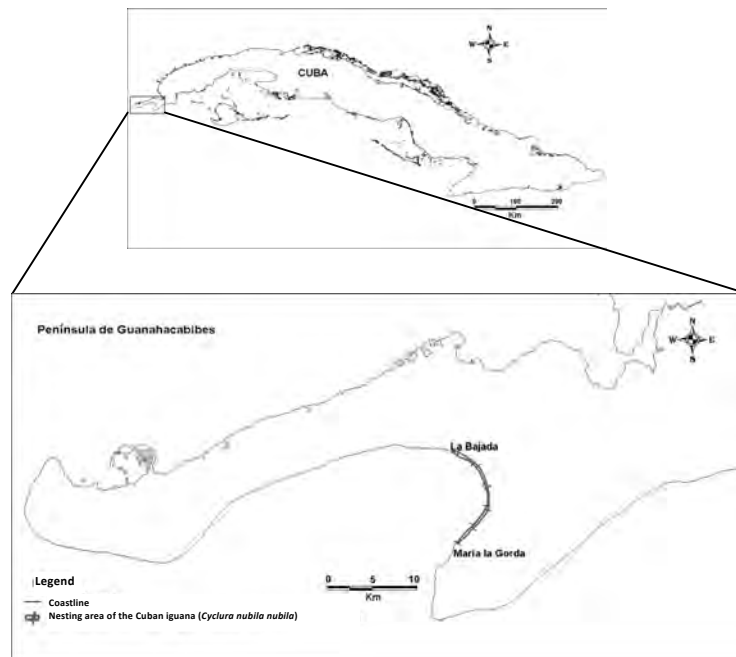


Figure 1. Location of the nesting area of the Cuban Iguana (*Cyclura nubila nubila*) in Guanahacabibes Peninsula, Pinar del Río.

The observations took place at the close of May and in June 2011 and were conducted along the strip of coastal vegetation near the 14-kilometer road stretching from the coastal community at La

Bajada to Maria la Gorda International Diving Center on the border of the conservation area of Corrientes Cape.

The road was built on the coastal dune, where the vegetation complex of sandy coast predominates, dominated by *Coccoloba uvifera*, *Thrinax radiata*, and *Bursera simaruba*, among other species that are typical of this plant formation. The substratum where the nests were observed is made up fundamentally of sand, some earth, and remnants of dead corals accumulated as a result of sea floods and intensive surge generated by hurricanes that have swept the peninsula.

In May through June 2011, 20-32 female iguanas were counted in each survey (3 surveys per month) along the 14 kilometers of road. No male specimens were found. These numbers indicate that this is an egg-laying site, which is affirmed by the residents in the area. We think this is not the only egg-laying site in the Park, since there has been reference to other sites located in Playa Antonio and Playa La Barca, and the westernmost area of San Antonio Cape that are used by the iguana population living in the cliffs. It seems that this site is used by the population distributed in the forest areas next to the coastal sector from La Bajada to Maria la Gorda.



We found female iguanas digging their nests and going in and out of them to the left of the road, as we went from La Bajada to Maria la Gorda in a strip of land one to two meters wide and demarcated by the road and the plant formation typical of the dune. This strip is covered with low grassy vegetation due to periodic land clearing (Figure 2).

Figure 2. Nesting site of *Cyclura nubila nubila* on the edge of the road in Guanahacabibes National Park.

Many nests were found on the very edge of the road - the nest tunnels stretching under the pavement – while others were found a little farther into the inner strip (Figure 3).



Figure 3. Nests of *Cyclura nubila nubila*, under the pavement of the public road leading to Maria la Gorda International Diving Center in Guanahacabibes National Park.

In May, 35 nests were quantitated along a one-kilometer transect, and in June, 17 nests were found along another one-kilometer transect in an adjacent area, but no nests were opened. We do not know whether each iguana makes one or several attempts to make its nests, as is common for *Cyclura cychlura* in the Bahamas (Iverson *et al.* 2004).

This is the second nesting site of this species that has been described for science in Cuba. The other description is from the sector of Monte Cabaniguán within Delta del Cauto Fauna Refuge,

in the southeastern region of Las Tunas province, which also references the nesting sites of *Crocodylus acutus*.

As this nesting site is located in an area of public use within the National Park and is in proximity of the road leading to a tourist resort, protection of this area is representative of the traditional conflict between conservation and development. Therefore, immediate management measures will be taken to protect the site and mitigate the effects of human activities: warning signs will be erected during the breeding season, land clearing will be regulated along the edge of the road, and an environmental education program will be implemented and targeted mainly at the managerial personnel and tourist resort employees.



We propose for the short term to initiate studies of this nesting site in order to assess the following parameters: description of the substratum and vegetation, determination of nesting phenology, and quantify the density of nests, their sizes, and the percentage of hatching success, etc. (Figure 4).

Description of this nesting site for *Cyclura nubila nubila* and its further detailed study will contribute to improved planning for the functional zoning of the protected area and will achieve better conciliation between the conservation and management of this iguana species and public use needs within Guanahacabibes National Park.

Figure 4. Specialists of Guanahacabibes National Park while collecting data to describe the nests of *Cyclura nubila nubila* and the nesting site.

References

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