FIRST RECORD OF THE SPINY-TAILED IGUANA CTENOSAURA SIMILIS (GRAY, 1831) (SQUAMATA: IGUANIDAE) IN VENEZUELA

DIEGO FLORES ¹ AND LUIS FELIPE ESQUEDA ²

¹ Biology student, Escuela de Ciencias, Universidad de Oriente, Cumaná, Venezuela. E-mail: diegoflorespadron@gmail.com
² Research associate, Laboratorio de Biogeografía, Facultad de Ciencias Forestales y Ambientales, Universidad de Los Andes, Mérida 5101, Venezuela. E-mail: luisfesqueda@gmail.com

The spiny-tailed iguanas of the genus *Ctenosaura* Wiegmann, 1828, range from coastal central Mexico to Panama, inhabiting tropical arid and moist lowlands below 500 m, along Atlantic and Pacific coasts. They comprise about 17 species (Queiroz 1987, Buckley and Axtell 1997, Köhler *et al.* 2000). Most species posses restricted distributions, although some, like *Ctenosaura acanthura, C. hemilopha, C. pectinata* and *C. similis*, show a wider distribution. The later has the greatest distribution, being present from the Mexican isthmus of Tehuantepec, to Colombia, including southern Mexico, Nicaragua, Guatemala, El Salvador, Honduras, Belize, Costa Rica, Panama, Providence and San Andres islands (Smith and Taylor 1950, Smith 1972, Henderson 1973, Köhler 1995a,b).

The first author spotted a population of *Ctenosaura* iguanas in eastern Venezuela, specifically in Anzoátegui state, at the borders of municipios Diego Bautista Urbaneja, Sotillo, and Bolívar. A collected specimen, deposited in the herpetological collection of the Laboratory of Biogeography at University of Los Andes in Mérida (museum number ULABG 7315), substantiates the distribution record. Morphological details and coloration of the specimens (Fig. 1) agree with the description of *Ctenosaura similis* (Gray, 1831). This constitutes the first record in Venezuela, and the westernmost locality for the species, circa 1980 Km straight-line NE of Colombian Providencia Island.

We think of at least two scenarios to explain the presence of *Ctenosaura similis* in Venezuela. The first involves introduction of the species in this country, from an unknown locality in its range of distribution. Introductions have been documented for other places, like in Florida, USA (Krysko *et al.* 2003, Townsend *et al.* 2003). The second scenario includes the possibility that the isolated population represents a different taxonomic entity from a formerly widely distributed ancestor in northern South America, a contention that have to await the study of more animals through the application of more detailed analyses.

In the case of an introduction, there will be a need to study the ecological impacts on the local biota, and to implement an eradication plan or monitoring of the population. In the case of being an undescribed taxon, there will be a need to protect the relict population. We ignore if there is human pressure on the Venezuelan population of this spiny-tailed iguana, although current sustained pressure onto native populations of the common iguana (*Iguana iguana*) make us think of such a possibility. Incidental captures, as well as habitat modifications, could account for such a pressure. At least ten species of *Ctenosaura* are included in the Red Book of Threatened Species (IUCN 2007) because of high pressure on their fragmented and restricted habitats, some with exotic competing species invading their places. Some of these endangered species also suffer from illegal commerce.

ACKNOWLEDGMENTS

We thank Enrique La Marca for encouraging us to publish this record and for providing valuable comments and corrections that highly improved the original manuscript.

REFERENCES

- Buckley, L.J. and R.W. Axtell. 1997. Evidence for the specific status of the Honduran lizards formerly referred to *Ctenosaura palearis* (Reptilia: Squamata: Iguanidae). Copeia 1:138-150.
- Henderson, B.W. 1973. Ethoecological observations of *Ctenosaura similis* (Sauria: Iguanidae) in British Honduras. Journal of Herpetology 7(1):27-33.
- IUCN. 2007. 2007 IUCN Red List of Threatened Species. www.iucnredlist.org. Downloaded 18 June 2008.
- Köhler, G. 1995a. Eine neue Art der Gattung *Ctenosaura* (Sauria: Iguanidae) aus dem sfidlichen Campeche, Mexiko. Salamandra 31:1-14.



FIG. 1. Spiny-tailed iguana, *Ctenosaura similis*, in the wild. Photo by Diego Flores.

Iguana de cola espinosa, Ctenosaura similis, en el campo. Foto de Diego Flores.

- Köhler, G. 1995b. Freilanduntersuchungen zur morphologie und okologie von *Ctenosaura bakeri* and *C. oedirhina* auf den Islas de la Bahia, Honduras, mit bemerkunen zur schutzproblematik. Salamandra 31:93-106.
- Köhler, G., W Schroth and B. Streit. 2000. Systematics of the *Ctenosaura* group of lizards (Reptilia: Sauria: Iguanidae). Amphibia-Reptilia, Leiden 21:177-191.
- Krysko, K.L., F.W. King, K.M. Enge and A. T. Reppas. 2003. Distribution of the introduced black spiny-tailed iguana (*Ctenosaura similis*) on the southwestern coast of Florida. Florida Scientist 66(2):74-79.
- Queiroz, K de. 1987. A new spiny-tailed iguana from Honduras, with comments on relationships within *Ctenosaura* (Squamata: Iguania). Copeia 4:892-902.
- Smith, H.M. and E.H. Taylor. 1950. An annotated checklist and key to the reptiles of Mexico exclusive of the snakes. United States National Museum Bulletin 199:1-253.
- Smith, H.M. 1972. The Sonoran subspecies of the lizard *Ctenosaura hemilopha*. Great Basin Naturalist 32:104-111.
- Townsend, J.H., K.L. Krysko and K.M. Enge. 2003. The Identity of Spiny-tailed Iguanas, *Ctenosaura*, introduced to Florida, USA. Herpetozoa 16(1/2):67-72.