EXTENSION OF THE KNOWN GEOGRAPHIC DISTRIBUTION OF
ATELOPUS CRUCIGER IN NORTHERN VENEZUELA

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Abstract: A new locality is reported for Atelopus cruciger in the Interior Serranía of the Coastal Cordillera of Venezuela, based on field observations in a cloud forest of Guatopo national park in 1984. This is evidence of a broader geographical distribution for the species. The need to expand herpetological surveys to the rest of the Cordillera, given it is a "critically endangered" species which could be present in other localities, is stressed. It is highlighted the importance of Guatopo as a protected area for this species and the need to check its persistence in the park.

Key words: Amphibia, Anura, Atelopus cruciger, distribution, Guatopo National Park, Venezuela.

RESUMEN: E. Yerena y C. Rivero Blanco. "Extensión de la distribución conocida de Atelopus cruciger en el norte de Venezuela". Se reporta una nueva localidad para Atelopus cruciger en la Serranía del Interior de la Cordillera de La Costa de Venezuela con base en observaciones de campo realizadas en 1984 en un bosque nublado del parque nacional Guatopo. Esto evidencia que la especie tiene una distribución mayor a la conocida. Se resalta la necesidad de extender las exploraciones hacia el resto de la cordillera por cuanto la especie, catalogada como en "peligro crítico", podría estar presente en otras localidades. Se destaca la importancia de Guatopo como área protegida para esta especie y la necesidad de constatar su existencia actual en el parque.

Palabras clave: Amphibia, Anura, Atelopus cruciger, distribución, Parque Nacional Guatopo, Venezuela.

INTRODUCTION
Atelopus cruciger Lichtenstein and Martens 1856, is a "critically endangered" species (Manzanilla and La Marca 2004, Manzanilla et al. 2004), belonging to a vertebrate group considered as of great concern from the conservationist point of view (La Marca et al. 2005). The habitat for this species is humid mountain forests (Sexton 1958) of the Coastal Cordillera of Venezuela (Manzanilla et al. 2004, Rivas 1998, Löfters 1996, Rivero 1961), specifically within the Litoral and the Nirgua-Tinaquillo mountain ranges (Fig. 1), which belong to the Coastal Range biogeographical region (Péfaur and Rivero 2000). Improving knowledge on its geographical distribution is essential to optimize conservation efforts. This report shows the species was present, at least until 1984, in Guatopo national park, located in the Interior Serranía of the same Cordillera, therefore implying an extension on its geographical distribution. We provide here details on this finding and discuss some possible consequences of it.

NEW DISTRIBUTION RECORD
As a part of a characterization study of Guatopo national park (Yerena 1985), the first author did an on-foot trip to the summit of Cerro Azul (1500 m elevation), from February 24th to 26th 1984, following the Río de Piedra, a permanent mountain stream (Lagartijo river basin), helped by a field assistant, a pathfinder and a park-ranger. The goal of this trip was to gather evidence on the possible occurrence of non-previously reported cloud forest in the park.

Along the trip, in diurnal hours, it became evident a relatively high abundance of a toad species along the route, close and away from the water stream, between 600 and 1100 m of elevation, on a perimeter around 66º33'29"W - 10º01'35"N (Fig.1). We visually identify the toad as Atelopus cruciger (Fig. 2), confirmed by other herpetologists (E. La Marca, C. Barros-Amorós, pers. com.). This finding was previously reported although not formally published (Yerena 1985).

The habitat where it was observed is uninhabited by humans (Yerena and Escalona 1995), although some scattered and abandoned orchards still can be found, and neither trails nor hikers occur, except for occasional poachers. The time of the sighting (February) is usually the annual extreme driest month on this portion of the park; the nearest pluviometer station (Río de Piedras, 400 m elevation) records a mean annual precipitation of 1117 mm (Yerena 1985). Precipitation on the upper watershed portion where A. cruciger was seen might be higher.

DISCUSSION
From a physiographic point of view (Freiles 1969, Fig. 1), the Coastal
Cordillera of Venezuela is a “province” comprised by three “regions”: Nirgua-Tinaquillo Serrania, Litoral Mountain Chain and Interior Serrania. The distribution map reported by Manzanilla and La Marca (2004) spatially corresponds only to the former two, despite they name it under the generic name of Cordillera de La Costa of Venezuela; while Guatopo belongs exclusively to the third region. Therefore, the recent distribution of *Atelopus cruciger* should be considered extended to the three mountain regions of the Coastal Cordillera (Fig. 1), within the altitudinal range corresponding with that reported for the species (La Marca et al. 2005), confirming Lötters et al. (2004) contention that its distribution could extend to the whole Coastal Cordillera. The only record outside this mountain range appears to be that of “Curanna (Cumana, Gunther, 1858)” of Rivero (1961). La Marca (1992) recommended to take out this distribution record from Sucre State (NE Venezuela) due to its uncertainty.

Most of the biological studies in Guatopo have been carried out in areas along the asphalted highway, mainly because access to the higher (above 700 m) elevations of the park is difficult (Yerena 1985). James R. Dixon (Wildlife and Fisheries Science Department, Texas
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REFERENCES


