

**LEPTODACTYLUS SILVANIMBUS (AMPHIBIA: ANURA:
LEPTODACTYLIDAE): NATURAL HISTORY NOTES,
ADVERTISEMENT CALL, AND RELATIONSHIPS**

W. Ronald Heyer

Department of Vertebrate Zoology, Smithsonian Institution, Washington, DC 20560, USA

Rafael de Sá

Department of Biology, University of Richmond, Richmond, Virginia 23173, USA

James R. McCranie

10770 SW 164th Street, Miami, Florida 33157-2933, USA

Larry David Wilson

Miami-Dade Community College, Kendall Campus, 11011 S.W. 104th St., Miami, Florida 33176, USA

In July 1995, we visited two of the three previously known localities for *Leptodactylus silvanimbus* in Departamento de Ocotepeque, Honduras. We found a new breeding site for the species, recorded its advertisement call, and collected and observed its adults and larvae. The purpose of this paper is to present the results of these new findings and to comment on the relationships of *L. silvanimbus*.

NATURAL HISTORY NOTES

The two localities we visited, El Chagüitón and Belén Gualcho, were originally covered by cloud forest. El Chagüitón has been largely converted to pasture; Belén Gualcho is a regionally important city lacking intact forest in the environs (see Wilson et al. 1986, for further information).

The El Chagüitón site had been productive in previous years. We worked the site both by day and night, in periods preceded by, during, and following rain. No *Leptodactylus silvanimbus* were observed or heard, although *Bufo coccifer*, *Hypopachus barberi*, and *Rana berlandieri* were calling. These same species were collected from the same marshy portion of the pasture in previous years when the *Leptodactylus* also were present. We learned from local residents that the road bed was rebuilt after JRM and LDW had last visited the site in 1987; this resulted in the lowering of

the water level in the marshy pasture. Additionally, during the rebuilding process, the marshy area was almost completely drained.

We searched the road on the outskirts east of Belén Gualcho for the second historical breeding site. The area had undergone considerable change since JRM and LDW first worked the area in 1980. The only pond system we located that had the greatest likelihood of being the previously sampled *Leptodactylus silvanimbus* site is now a bare field where the stream had been dammed and shallow artificial pools created. There was very little vegetation around the pools, and the area was mostly exposed earth. A large chorus of *Bufo marinus* was heard and seen and their larvae were abundant in the pools. The fact that *B. marinus* were not collected previously by JRM and LDW at Belén Gualcho, suggests that the site had been modified significantly, thereby providing new habitat for *B. marinus* and likely destroying the conditions necessary for *L. silvanimbus* reproduction.

The site at which we found *Leptodactylus silvanimbus* was in the town of Belén Gualcho at an artificial, temporary pond that was surrounded and overgrown with a tangle of herbaceous and woody growth. The pond was approximately 3 x 8 x 0.5 m. On the night of 19 July 1995, we heard advertisement calls of *L. silvanimbus*, which was the only species calling from that particular pond (*Hypopachus barberi* and *Ptychohyala salvador-*

