Caribbean Journal of Science, Vol. 39, No. 3, 398-399, 2003 Copyright 2003 College of Arts and Sciences University of Puerto Rico, Mayagüez

Hyla miliaria (Anura: Hylidae) in Honduras, with Notes on Calling Site

JAMES R. MCCRANIE^{1,4}, JOSIAH H. TOWNSEND², AND LARRY DAVID WILSON³ ¹10770 SW 164th Street, Miami, Florida 33157-2933, ²Division of Herpetology, Florida Museum of Natural History, University of Florida, Gainesville, Florida 32611, ³Department of Biology, Miami-Dade College, Kendall Campus, Miami, Florida 33176-3393. ⁴corresponding author—jmccrani@bellsouth.net

Hyla miliaria (Cope) is a huge (to 110 mm SVL; Duellman 2001) canopy dwelling fringe-limbed hylid that occurs in low and moderate elevations (20 to 1330 m) in humid forests from the Río San Juan region of southeastern Nicaragua to the central cordillera of Colombia (Duellman 2001; Ruiz-Carranza et al. 1996; Savage 2002). The species is extremely rare in collections; only 16 specimens are known (Savage, 2002). The calling site of this species is also poorly documented. Duellman (1970:354; reprinted 2001) presented circumstantial evidence of one calling "from a large oak tree in a cafetal." Savage (2002) presented circumstantial evidence that this species calls from tree holes. Savage (2002:335) stated "Michael Fogden reports hearing a call, later associated with this species, coming from high in a tree at night. The tree hole site was spotted during the day, but with no frog. Late in the afternoon Fogden waited on a ladder at the tree hole and captured the frog when it returned at dusk."

On the night of 29 May 2003 at Bodega de Río Tapalwás (14°56.140'N, 84°31.871'W), 190 m elevation, Gracias a Dios, Honduras, Tomás Manzanares Ruis and JRM traced a call of an unknown frog to a tree hole in a Santa María (Spanish) or Krasa (Miskito) tree (*Calophyllum brasiliense*). Climbing the tree to the hole revealed an adult male *Hyla miliaria* (UF 137207) sitting above the water line inside the upper edge of the tree hole. The opening to the tree hole was located 228 cm above the forest floor. The tree hole opening measured 70×80 mm and had a depth of 200 mm. The tree was 44.5 cm in circumference at chest height. The frog has a SVL of 91.2 mm and agrees with the descriptions of the species provided by Duellman (2001) and Savage (2002). The call was a loud, booming single note repeated 12 to 15 times followed by 15 to 25 min of silence. The frog was first heard calling at about 1900 h and collected at 2250 h. The locality lies about 470 km N of the Río San Juan region of Nicaragua.

At the same locality on the night of 1 June 2003, Tomás Manzanares Ruis and JRM traced another calling male of Hyla miliaria to a Guácimo (Spanish) tree (Luehea seemanii). Because of the huge size of the tree and the height from where the frog was calling, we decided that it was too dangerous to climb the tree at night. We returned to the tree at about 1000 h the following day. A water-containing tree hole was found in the tree in the area from where the call was located the previous night. The hole contained an adult male *H*. miliaria (UF 137208; SVL 94.4 mm) sitting above the water line. The opening to the hole was 10.6 m above the forest floor and was 86×130 mm. The depth of the hole was estimated at 610 mm with a water depth of 460 mm. Circumference of the tree at chest height could not be measured because extensions of the tree buttresses reached heights of at least 2 m. The call of the second male seemed to be identical to that of the first male. The second call was first heard at about 1900 h and could still be heard at 2200 h before we walked out of hearing range. Both frogs were calling on nights in which there had been no rainfall for at least the previous 12 h. Hyla miliaria was not heard calling at this site on the nights of 30-31 May and 2 June when heavy rain showers fell either in late afternoon or early at night. Neither eggs nor tadpoles were present in either tree hole.

Acknowledgments.—F. Wayne King, Max A. Nickerson, Fred G. Thompson, and the Reptile and Amphibian Conservation Corps (RACC) provided funds to support our field work. Collecting and exportation permits were provided by Conrado Gonzalez and Martha Moreno of COHDEFOR, Tegucigalpa. Assistance with these permits was furnished by Mario Espinal. Help with the capture of the frogs was provided by Tomás Manzanares Ruis and Luís Lacuth. Additional field assistance was provided by Bolven Graham R.

LITERATURE CITED

- Duellman, W. E. 2001. The hylid frogs of Middle America. Soc. Stud. Amphib. Reptiles, Contrib. Herpetol. 18:i-xvi, 1-694, i-x, 695-1159, pl. 1-92.
- Ruiz-Carranza, P. M., M. C. Ardila-Robayo, and J. D. Lynch. 1996. Lista actualizada de la fauna de Amphibia de Colombia. *Rev. Acad. Colombiana Cienc.* 20(77):365-415.
- Savage, J. M. 2002. The Amphibians and Reptiles of Costa Rica. A Herpetofauna between Two Continents, between Two Seas. Chicago, Illinois: University of Chicago Press.